AN ABSTRACT
OF A

Course of Lectures
ON THE

INTERNAL DISEASES OF THE EYE AS SEEN WITH THE OPHTHALMOSCOPE.

Delivered at the Royal London Ophthalmic Hospital, Moorfields.

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LECTURES III. & IV.

THE OPHTHALMOSCOPIC EXAMINATION OF DISEASED EYES.

The Refracting Media: the Cornea, Crystalline Lens, Vitreous Humour, &c.

GENTLEMEN,—Before commencing any ophthalmoscopic examination of the fundus oculi, you should always ascertain the condition of the refracting media, both with the oblique illumination and in the erect image. This will prevent your making many an error of diagnosis which might otherwise occur. In examining the lens or vitreous humour, it will be advisable for the beginner to have the patient's pupil widely dilated with atropine, although an expert observer may, even with an undilated pupil, be generally able to detect opacities situated at the margin of the lens, by directing the patient to look far in the opposite direction, which will enable the surgeon to look in a very slanting direction behind the iris.

With the oblique illumination opacities in the refracting media will appear in their true colours; opacities of the lens, for instance, look like grey or white lines or patches on a dark background; whereas in the erect image they will appear as dark spots on a red background, for, as their surfaces reflect but little light, they will be seen in shadow. There is no difficulty in judging of the exact position if the opacity is situated in the cornea, the capsule, or the lens. But in the vitreous humour it is less easy to estimate the depth at which it is placed. This is best decided in the following manner:—The observer, employing the erect image, should look straight into the eye, so that his visual line passes through the turning-point of the patient's eye (which corresponds nearly to the posterior pole of the crystalline lens). Now if the eye under observation is moved about in different directions, the turning-point and the corneal reflection will alone remain stationary. Hence any opacity situated exactly at the turning-point will remain immoveable; whereas if it is situated in front of this point it will move in the same direction as the cornea; if behind it, in a direction opposite to that of the cornea. The further the opacity lies from the cornea, the greater will this movement be. If the object lies deep in the vitreous, just in front of the retina, the surgeon should examine the eye in the reverse image, and on slightly moving the object-lens from side to side he will notice that the further the object is from the retina, the more marked will be its movement in the same direction as that of the lens.

The cornea is best examined with the oblique illumination, especially for determining the exact situation, size, and nature of foreign bodies, ulcers, or opacities. A second lens, or even a microscope, may be used for the purpose of magnifying.

Conical cornea may easily be recognised without any aid, if it be considerable in degree; for, on looking at it from the front, the centre of the cornea will appear unusually glistening and bright, as if a little tear-drop were suspended from it. The shape and size of the conicity become still more apparent on regarding the cornea in profile; but in the erect image even slight degrees of the affection may be at once detected. For on illuminating the cone we receive a red reflection from the apex, which gradually becomes shaded off and darker towards the base; so that the central bright spot is surrounded by a dark zone, which is again encircled by a red ring. If we throw the light at different angles on the centre of the cone, that side of it which is opposite to the light will be darkened. On examining the fundus in the reverse image, a considerable parallax is noticed; for, on moving the object-lens to and fro, certain portions of the disc and of the vessels upon it will be displaced and distorted, whilst others remain unchanged.

The anterior chamber and iris.—Deposits of lymph, effusions of blood, or foreign bodies in the anterior chamber are best seen with the oblique illumination. The same is the case with morbid changes in the tissue of the iris, or deposits of lymph at the edge or into the area of the pupil. Whereas the examination in the erect image will be found very useful in detecting any gaps in the iris, or any detachment of the latter from its ciliary insertion; for in such cases we shall obtain through the gap a bright-red reflex from the fundus, it being taken for granted of course that the media behind are transparent.

The crystalline lens.—A fully-formed, mature cataract is readily distinguished with the naked eye as a whitish, opalescent body in the area of the pupil; but it is different with incipient cataract, especially if it be but slight in degree and confined to the margin of the lens. Both the soft and hard variety of cataract generally commence at the periphery. In *incipient cortical* (soft) *cataract* we notice, in the erect image, dark, well-defined stripes intersecting the red fundus, and radiating from the periphery to the centre; between them there are generally smaller stunted stripes, or little opaque patches. The interjacent lens-substance is at first transparent, but gradually the cloudiness becomes more general and diffuse. With the oblique illumination the opacities assume a greyish-white tint, the stripes being broad, white, and often opalescent; but there is no yellow reflex, and this is of importance, as proving the absence of a more or less hard nucleus. In *fluid cataract* the opacity is homogeneous, of a milky-white or dirty-grey colour, and reaches quite up to the anterior capsule; and there are no opalescent stripes. The *nuclear or hard senile cataract* is met with after the age of thirty-five or forty, and, as a rule, also begins at the margin in the form of small narrow stripes and spots; the opacity gradually increases and assumes towards the centre a yellowish colour, which indicates the presence of a hardish nucleus. The larger the area yielding this tint, and the darker the colour, the larger and harder is the nucleus. If the opacity commences at the posterior pole of the lens, the general condition of the eye must be carefully examined—viz., the sight, the field of vision, the eye-tension, and the ophthalmoscopic appearances of the fundus, if the latter be still visible, for this form of cataract (posterior polar cataract) not unfrequently occurs in the later stages of certain affections of the choroid and retina.

Lamellar cataract.—It is very important, in a practical point of view, to recognise this form, as it is often best treated by the formation of an artificial pupil, without any interference with the lens itself. On dilating the pupil with atropine, and examining the lens in the erect image, a circular, uniform, dark opacity (from two to two and a half lines in diameter) will be noticed in the central portion of the lens, surrounded by a more or less clear red zone. The cataract, in fact, consists of a layer of opaque lens-substance lying between the transparent nucleus and a clear portion of the cortical substance. With the oblique illumination the opacity appears of a uniform light-grey tint, sharply defined, and surrounded by a margin of lens-substance, which may be either quite transparent or is here and there studded with small opacities. If this marginal zone is sufficiently clear and broad to permit of good sight when the pupil is widely dilated with atropine, an artificial pupil should be made so as to enable the patient to see through this clear portion, and the lens itself is not to be operated on.

Capsular opacities. — The anterior capsule of the lens is often the seat of deposits of lymph due to iritis. These may be confined to the edge of the pupil, leaving the central area free; or the latter may be covered by a more or less thick film, or blocked up by a dense nodule of lymph. Again, after an operation for cataract, the pupil may be occluded by portions of wrinkled opaque capsule, enveloping perhaps remnants of cataractous lens-substance. *Capsular cataract* is distinguished by its white chalky appearance. Strictly speaking, the term is incorrect; for, though the capsule may be thickened and wrinkled, it remains

transparent, the opacities being due to deposits on its inner surface. In irido-choroiditis, there is often great proliferation of the intra-capsular cells, subsequently perhaps undergoing fatty and chalky degeneration, which also extends to the lens. *Anterior central capsular cataract* consists of a small opacity occupying the centre of the pupil. When it is very prominent and elevated above the level of the capsule, it is termed pyramidal cataract. It may be congenital, but is more frequently formed in early childhood, in consequence of a perforating ulcer of the cornea.

In cases in which it is doubtful whether or not the crystalline lens is present, and if neither the oblique illumination nor the ophthalmoscope enable you to arrive at an exact conclusion, the *catoptric test* must be employed. This test depends upon the three images which may be observed in a normal eye when a lighted taper is moved before it. Two of these images are erect; the third is inverted. The erect images are produced by reflection from the surface of the cornea and the anterior surface of the lens; the inverted one by the concave posterior surface of the lens. The first two move in the same direction as the candle; the last in the opposite. Now, if the lens is absent from the pupillary area, the lenticular reflections are of course wanting. Moreover, the normal eye will in such a case be extremely hypermetropic. If the lens has been dislocated into the vitreous humour, its situation can be easily recognised in the erect image, for it will appear as a dark lenticular body lying in the lower or lateral portion of the vitreous. If there is only partial displacement of the lens, and not a complete dislocation, its free edge will be noticed as a dark, sharply defined curved line, traversing the red fundus, and forming the outline of the transparent or opaque lenticular disc.

Diseases of the Vitreous Humour.

Inflammation of the vitreous humour (hyalitis) is, as a rule, a secondary affection, supervening upon inflammation of the retina, choroid, &c. But it appears more than probable that it may also occur idiopathically, and without any perceptible participation of the other tunics of the eye.* The progress of hyalitis is best studied when a foreign body (e. g., chip of steel) becomes lodged in the vitreous; for, with the ophthalmoscope, we generally find that the vitreous in the vicinity of the foreign body soon becomes hazy, and the latter surrounded by a greyish veil, which increases in density and thickness the more connective tissue is developed, and assumes a yellow tint if suppuration sets in. In *simple hyalitis* the vitreous is diffusely clouded, the details of the fundus hidden by a grey film, and the sight greatly affected. There are also dark membranous or thread-like films, which are either fixed, or float about when the eye is moved. In the *suppurative* form a creamy yellow reflex is often noticed from the anterior portion of the vitreous, which becomes very apparent with the oblique illumination.

Opacities of the vitreous are best observed in the erect image, the patient being directed to move his eye quickly and repeatedly in various directions, which will cause the opacities to be shaken up and float about. The opacity may be diffuse and extend over the whole fundus, or it may be chiefly confined to the centre, whilst the details of the fundus are distinctly visible at the periphery. But together with the diffuse opacity we generally observe dark, membranous, filiform or reticulated opacities, which are either fixed or floating, and which may be due to blood-effusions, to pathological changes in the vitreous cells, or to the formation of connective-tissue elements. To the patient they appear as dark cobwebby spots or flakes, being the more observable the nearer they are to the retina. They occur most frequently in inflammation of the choroid and ciliary body, and especially in sclerectasia posterior. Not unfrequently the opacities of the vitreous are the first symptoms of inflammation of the choroid; and it is not till a later stage, when the vitreous has again become transparent, that the (perhaps slight) inflammatory changes of the choroid are detected. I have often observed this in cases in which the disease was dependent upon syphilis. Effusions of blood into the vitreous frequently cause these opacities, which then yield a peculiar bright-red reflex. But if the hæmorrhage is very extensive and diffuse, it may be impossible to illuminate the fundus, and it yields no reflex, but looks quite dark. The chief danger of hæmorrhage into the vitreous lies in the fact that it is apt to recur again and again, and may thus lead to detachment of the retina, glaucomatous complications, or atrophy of the eyeball. In the treatment of vitreous opacities we must be chiefly guided by the cause, and by the fact whether they are due to inflammatory affections of the deeper tunics of the eye or to blood-effusions. In cases in which the opacities depended upon insidious choroiditis or irido-choroiditis (especially syphilitic), I have often derived very marked benefit from mercurial inunction, combined with the application of the artificial leech to the temple. The latter remedy especially accelerates the absorption of the opacities by preventing and relieving congestion of the choroidal and retinal circulation. If the patient is weak, dry-cupping may be substituted.

I must here point out to you the importance of distinguishing between these pathological opacities of the vitreous and the subjective physiological muscæ volitantes, which everyone sees more or less, and which are met with in perfectly healthy eyes. They appear to the patient as small transparent discs or vesicles, which are arranged in groups or strung together like a row of bright beads, and float about the visual field, being especially observable when he regards a very highly illuminated object—as, for instance, the bright sky. These muscæ are generally due to extremely minute beaded filaments or groups of granules in the vitreous, and are so small as to be quite invisible with the ophthalmoscope. Hence this instrument is of great practical value in enabling us to distinguish between the physiological and pathological muscæ, for as soon as they are apparent with the ophthalmoscope we must regard them as due to some pathological changes in the vitreous. On the other hand, we can greatly relieve the patient's anxiety if we are able positively to assure him that the muscæ are simply physiological, and of no consequence.

Fluidity of the vitreous (*synchysis*) may be confined to a part of the vitreous chamber or involve the whole. This condition can only be diagnosed when there are floating opacities in the vitreous, for the symptoms which are sometimes stated to be indicative of it (I mean diminished eye-tension and tremulousness of the iris) are of no diagnostic value; for the eyeball may be stony hard and yet the vitreous be fluid, and tremulousness of the iris only occurs when the latter has more or less lost the support of the lens. If cholesterine crystals exist in the fluid vitreous, a most striking appearance is observed with the ophthalmoscope, for on moving the eye a shower of bright sparkling crystals floats through the field.

Detachment of the vitreous occurs sometimes, and is a condition of much importance, to which special attention has lately been directed by the researches of Iwanoff.* It is generally due to some injury of the eye; but is also met with in staphyloma of the cornea, sclerectasia posterior, and after operations for the removal of cataract, especially if vitreous has been lost. Now the latter is a fact of much practical importance; for it should make us anxious and careful to avoid, if possible, any loss of vitreous in extraction of cataract, an accident to which many operators still attach but too little importance. For there is no doubt that eyes in which vitreous has been lost are prone to an insidious chronic form of choroiditis, and are far less likely to prove permanently serviceable than if this has not occurred. And if, besides this, they are liable to detachment of the vitreous, this must be regarded as a very dangerous complication, as it is very apt to be followed by detachment of the retina. The ophthalmoscopic symptoms of detachment of the vitreous are still uncertain; but it is probable, according to von Graefe, that the sudden, sharply defined, and tolerably uniform opacity in the posterior segment of the vitreous, which sometimes occurs in sclerectasia posterior, and is almost constantly followed by detachment of the retina, is a detachment of the vitreous.

Foreign bodies in the vitreous but too often excite very severe inflammation of the eye, leading perhaps to atrophy of the globe. If the refracting media are clear enough, we find with the ophthalmoscope that the foreign body generally soon becomes surrounded by a delicate greyish-blue film, which gradually increases in density, and assumes a

* This has, however, been recently denied by Dr. Hermann Pagenstecher, whose interesting experiments have led him to the conclusion that the vitreous cannot undergo primary inflammation. (Vide Knapp's Archiv für Ophthalmologie und Otologie, i. 2.)

* Graefe's Archiv für Ophthalmologie, xv., 2.

more yellowish-white tint, encapsuling and hiding the foreign body from view. In very rare cases this enveloping membrane is so transparent that the foreign body can be seen within it.

Cysticerci in the vitreous humour are of extremely rare occurrence in England, whereas in Germany they are not very uncommon. The entozoon generally lies at first beneath the retina, which it subsequently perforates, and enters the vitreous. It may, however, carry the retina with it, and thus cause a very extensive detachment of the latter. If the cysticercus lies free in the vitreous, it appears with the ophthalmoscope as a pale, greyish-blue, circular vesicle, having a short neck and round head, on which the suckers are observed. If it be alive its outline may be seen to undergo slight undulating movements, the head being alternately stretched out and retracted into the receptaculum. On strongly illuminating the vesicle, its surface affords a peculiarly bright iridescence.

In very rare instances new plastic formations of connective tissue are observed in the vitreous. Ophthalmoscopically, they appear as smooth or somewhat striped, pale, yellowish-white, membranous masses, a few small bloodvessels, perhaps, coursing over their surface; but they are quite free from the nodulated elevations observed in glioma retinæ. This condition is well illustrated in the right eye of the patient you saw this evening.

Persistent hyaloid artery.—You are aware that the hyaloid artery, which runs in the fœtus from the optic nerve to the posterior pole of the lens, shrivels up and disappears during the later months of fœtal life; but very exceptionally remains of it can subsequently be traced in the vitreous with the ophthalmoscope, as a dark stripe or line running from the disc towards the posterior pole of the lens. If the vessel is still wholly or partially patent, and carries blood, it appears red by incident light. The case of persistent hyaloid artery and vein which I have shown you to-night is, as far as I am aware, unique, from the fact that not only both artery and vein are persistent, but that the artery appears at the anterior extremity to pass directly over into the vein, the two vessels together being several times twisted round each other, somewhat like those of the umbilical cord.

ON THE

SO-CALLED "BONE-SETTING," ITS NATURE AND RESULTS.

BY WHARTON HOOD, M.D., M.R.C.S.

(*Concluded from page 462.*)

PROCEEDING next to the consideration of the adhesions about the ankle-joint or foot, the method of grasping the limb for rupturing them is shown in Fig. 4, which seems hardly to need any kind of explanation. The proximal side of the affected joint being firmly held, and the thumb pressure made in the ordinary way, the tarsus is so grasped as to give the greatest attainable leverage, the foot twisted a little inwards or outwards, then sharply bent up upon the leg, and again straightened. As a rule, it is desirable to execute this manœuvre twice—once with an inward, and once with an outward twist; and also to take care that the movements of the joint are free in all directions. In order to secure this freedom the shortness of the lever renders it especially necessary that the movements should be quick, or almost sudden, in their character, so that they may the more certainly rupture, and not stretch, any adventitious impediment to motion.

FIG. 4.

The method of bending the knee-joint is shown in Fig. 5, and requires rather more assistance from description. In the

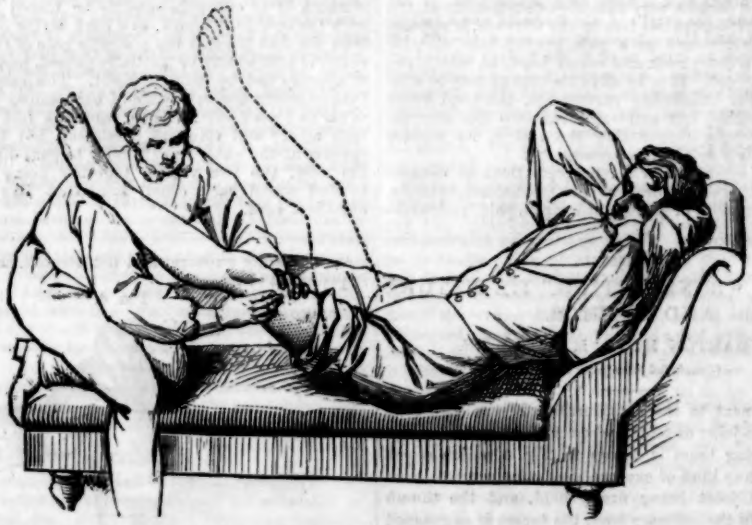
FIG. 5.

first place the operator grasps the heel of the patient between his knees, the inner condyles resting on the sides of the calcaneum below the malleoli, and receives the foot between the adductor muscles of the thighs, so as to grasp its whole length. In this position the foot serves as a lever by which to rotate the leg, almost without assistance from the hands, which grasp it just below the knee-joint, and with a thumb, as usual, upon the painful spot. The operator then rotates

the leg by a lateral movement of his thighs, and the next instant flexes it by a consentaneous movement of thighs and hands together. It is manifest that this movement can only carry flexion to a certain point, and, as soon as this limit is reached, the operator relinquishes his original grasp, places his right forearm (near the wrist) under the knee as a fulcrum, grasps the leg near the ankle with the left hand, and flexes it to the full extent. The first part of the procedure will serve to overcome the most important resistance; while the last completes the liberation thus commenced.

In dealing with the hip-joint, the leverage afforded by the length of the limb was used by Mr. Hutton with great ingenuity, and in the manner shown in Fig. 6. The twist

FIG. 6.



being given by the grasp of the operator's hands, the flexion was accomplished, and with almost irresistible force, by raising his body so as to bring the patient's limb into the position of the dotted lines. When this position is reached, the right or left hand, according to the limb, is shifted down so as to make pressure upon any painful spot in the groin while the flexion is completed. In this way the pelvis of the patient is fixed to the couch; and any tilting of his body upwards is prevented. As with other joints, the twist was made in the direction in which it was most painful; and if the limb was elongated, it was carried outwards from the median line—if shortened, inwards, during the act of flexion.

These methods of dealing with the knee- and hip-joints serve very well to illustrate what I have already said about the ingenuity of the means by which all mechanical or instrumental aids were dispensed with.

In Mr. Brodhurst's recent admirable work upon deformities, at pages 139 and 141 respectively, there are drawings of the contrivances to which he has had recourse, in cases of false anchylosis of the knee- and hip-joints; but although such instruments may sometimes be necessary, I think the methods I have described would be sufficient in nearly all cases, and that, whenever sufficient, they would be preferable. They enable the operator to exert as great a degree of force as would usually be either justifiable or necessary; and to exert it under the constant guidance of muscular sense and consciousness, so that, whatever might happen in the hands of an ignorant person, it ought to be absolutely impossible for a surgeon to inflict any injury upon normal structures. There are also the incidental, if minor, advantages of being independent of any instruments but those with which we are all furnished by nature; so that the patient is saved the loss of time and the cost incidental to the construction of an apparatus, as well as the disquietude of mind likely to be produced by its somewhat formidable aspect when complete.

In the case of all the larger joints it was Mr. Hutton's practice to have them rubbed twice a day with neats'-foot oil, and kept constantly enveloped in linseed-meal poultices for a week before, and for some days after, operating, and in many instances he had the joint steeped in water as hot as it could be borne for half an hour before commencing his manipulations. He believed that by these means he diminished the resistance of the muscles, and the risk of subsequent inflammation. So many of his acts and precautions were based upon the results of his large experience, that it would perhaps be hasty to infer that this practice would have been as well dispensed with. Mr. Hutton was a shrewd and observant man, and the poulticing covered an interval of time during which there were many risks of his losing his patient. I do not think he would have adhered to the custom unless he had seen reason to believe that he would incur danger by abandoning it. At all events it amused and satisfied the patient, and gave an air of deliberateness to the manipulation eventually practised for his cure.

Among the symptoms which Mr. Hutton was wont to remark as evidence of a bone being "out" (that is, as evidence of the existence of a state of things in which he could do good) in the shoulder or hip, was the occurrence of acute pain in or near the joint on awakening, so that the patient, if a child, would wake up crying. I presume that in these cases the joint would be moved so freely in the half-conscious period between sleeping and waking as to excite the pain in this manner.

The hip, from its liability to articular disease of a destructive character, from the insidious nature of the symptoms by which such disease is sometimes ushered in, and from the way in which the joint is covered by superincumbent structures, seems likely to be a portion of the body with which it would be particularly dangerous for an uninstructed person to deal. I could not help thinking that Mr. Hutton must have learnt this lesson by experience, for he was not only extremely careful in his examination of the hip, but also seemed, as it appeared to me, by no means sorry when he found reason for letting it alone.

I saw with him one instance in which I thought he had a lucky escape, and which I could not understand at the time; but since the publication by Mr. Teale and Dr. Macnab of their cases of simulation of hip-joint disease by suppuration of the bursa over the trochanter major,* I imagine that such a condition may have been the cause of my perplexity. The following is an outline of the case: A boy had been kicked on one hip by a pony, and the injury produced symptoms resembling those of morbus coxæ, for which the boy was treated. At length he was brought to Mr. Hutton, who said the hip was "out," and

* THE LANCET, Oct. 9th and Nov. 12th, 1870.

operated in his usual manner. The boy had great and increased pain afterwards, and was ordered to apply poultices. In five days his friends sent word that he was much worse, and that a great quantity of matter had been discharged. I anticipated the worst possible issue to the case, and supposed that the movements must have done great mischief; but a month afterwards I met the boy walking in the street, in good health, free from pain, and with a scarcely perceptible limp.

Mr. Hutton entertained a very firm belief that in all cases of hip disease the origin of the mischief was a fall or blow on the part, and this conviction was never shaken by the absence of such an incident from the history related by the patient or his friends. He maintained, and doubtless with much truth, that blows and falls were often unknown to parents, and were soon forgotten, not only by children, but, if attended by no immediate ill results, also by children of a larger growth. The hip cases in which he was useful were probably those in which, after injury, the limb had been kept voluntarily at rest for fear of exciting pain, or in which some inflammatory mischief had existed external to the joint, and had kept all the parts in a state of unnatural quiescence. A test to which he attached importance, and which points clearly to extra-articular as distinguished from intra-articular mischief, was that, in the absence of pain from direct pressure or shocks upon the heel, pain was still felt if the patient rested the heel firmly on the ground, and then, keeping it fixed as a pivot, attempted to rotate the foot inwards or outwards. A sign of similar import was the production of pain on stooping forwards.

On looking back over the whole question, it seems to me that the interest of the methods adopted by bonesetters rests chiefly upon the light it throws upon the means by which any necessity for such methods may be avoided. It appears to teach that there are cases, even classes of cases, very commonly treated by enforced or permitted rest, and in which the rest may easily be carried so far as to be prejudicial. In all forms of inflammation near but external to a joint, in the neighbourhood of fractures, and in ordinary sprains, it is certain that organisable material is likely to be effused among the tissues, and to become more or less firm and rigid. It probably often happens that inflammation around a joint is mistaken for inflammation within it; but if the attention of practitioners were once directed to the possibility of such an error, there would hardly be any case in which it might not be avoided by careful analysis of the existing symptoms. After the papers by Mr. Teale and Dr. Macnab, to which I have already referred, no surgeon should in future be misled by cases such as those to which they relate; and the hip is not the only joint liable to become fixed by muscular contraction and other changes in consequence of inflammation of a bursa in its vicinity.

In these instances of external mischief, as well as in the not uncommon event of a portion of the capsule or synovial membrane of a joint being painfully nipped between the ends of bones, the surgeon should seek to eliminate the idea of intra-articular disease; and, having done so, should aid, by the use of careful external support, the moderate resumption of ordinary movements. In the treatment of fracture too much pains can hardly be taken to commence early passive motion of the articulations of the affected limb, and on no account to dismiss as cured a patient in whom this precaution has been neglected, with the wholly unfounded expectation that the stiffness will cure itself. Of late years, especially in fractures of the forearm, I have made it a rule to move the joints frequently from the very beginning of the treatment, taking the thumb, fingers, wrist and elbow seriatim, and of course carefully steadying the fractured bones during the time.

With regard to sprains, and especially to the most troublesome of them all, sprains of the ankle, the treatment long practised and advocated by my father, Dr. Peter Hood,* will meet the whole difficulty. It consists essentially in the careful application of strapping to the injured part, and in the immediate but cautious use of the limb.

I cannot conclude these papers without expressing my appreciation of the generous support given, in the editorial columns of THE LANCET, to my humble endeavour to bring some spoils to the profession out of the camp of the Philistines.

* "On the Treatment of Sprained Ankle." Churchill. 1868.

What I have written has, I am well aware, excited much comment in certain circles; and some blame has even been cast upon me, not only for having, as I conceived, rendered justice to Mr. Hutton's personal character, but also on the score that I had unduly magnified his successes, and omitted to mention the harm that I am told he did. My critics should remember that I saw his practice for a comparatively short time only, at a period when his matured experience had probably taught him to avoid, as a rule, the cases in which his movements would be hurtful. They should also remember the natural tendency of patients who have received harm to go elsewhere. At any rate, from one or both of these causes, little or no injury to his people fell under my notice; and the results of his treatment, when not beneficial, were generally negative. But even if this had not been so, I should have considered the harm as being of no importance to us,—as being the natural result of a want of knowledge of anatomy and pathology, easy to be avoided when such knowledge has been gained. In fact, however, I was astonished, and often no less mortified, at the number and variety of instances in which the manipulations I have endeavoured to describe were followed by almost immediate cure.

It is a simple fact, and one that should be taken into account by any who would estimate the loss to the profession, both in money and reputation, consequent upon the neglect of any truths that there may be in what I have written, that Mr. Hutton was consulted by more than a thousand persons every year; and that nearly all of these had been previously under medical treatment.

Upper Berkeley-street, Feb. 1871.

ON HUMAN MILK.

BY C. MEYMOTT TIDY, M.B.,
JOINT-LECTURER ON CHEMISTRY AT THE LONDON HOSPITAL.

I HAVE been waiting somewhat anxiously to see if Dr. Muter's paper on Human Milk, published a few weeks ago in THE LANCET, received any further attention from the profession. This must be my apology for venturing to make a few remarks on the subject, though somewhat late in the day. I quite agree with Dr. Muter on the importance of examining the milk in various forms of disease. The fact is, as a profession, we have not profited so much by chemical analysis and research as we might have done. A physician's powers of analysis are too much limited to boiling urine.

In a paper published four years ago in the "London Hospital Reports" (1857) I gave a large number of analyses that I had made of normal human milk, as well as several careful analyses of the milk of other animals. Since then I have from time to time, when leisure and opportunity allowed, examined samples of the milk of patients who were suffering from any special form of disease, as well as in those cases—not very unusual, one regrets to say—where in a marked manner the infant fails to thrive on its natural food. I intend before long to place the results of my examinations before the profession, as some most important facts bearing on clinical medicine are, I think, deducible from them. I may just mention a single case in point, which has but recently come under my observation.

A lady, a patient of an old pupil, consulted me a few weeks back respecting her infant, six months old, that, to use her own words, "was becoming miserably smaller day by day." Upon examining the mother herself, I made out undoubted signs of incipient tubercular disease of the lungs. The child was certainly a most wretched-looking object, keeping up a perpetual whine, for it seemed to have no power to cry. I suggested an examination of the milk, to which she at once consented. I then found a most extraordinary diminution in the usual amount of fat; indeed, the percentage was much smaller than I had ever before noted. I proposed, acting on my analysis, drawing off the milk at stated times, mixing it with a given quantity of mutton suet, and that the child should be fed with this from the bottle. In order to obtain accurate results of this method of treatment, I prescribed no medicine excepting an occasional powder to keep the bowels regular. I saw the

child a fortnight afterwards. The result was astonishing. "She could see it grow," the mother told me. The same plan of treatment has been persevered in, and I am told it continues to thrive amazingly.

This is one case—I admit a very marked one—out of several that I have jotted down in my note-book where important facts may be gleaned from milk analysis. Indeed, I am daily becoming more and more convinced that a large number of the diseases of infants are better treated by the addition of the several matters wanting in their natural food than by pouring medicines down their little throats. I have from time to time made about seventy analyses of healthy human milk, and have taken the average of all these experiments as my standard.

There is one point on which I venture entirely to differ from Dr. Muter—that is, respecting the applicability of Dr. Frankland's method of water analysis to the examination of milk. I agree in this, that it would give us accurate results with such quantities as we ordinarily find in milk, just as I entirely question its accuracy with the minute quantities of a water residue. I am speaking with some confidence, having made a large number of experiments upon this matter, at the suggestion of my friend and colleague, Dr. Letheby. The trouble the method involves is enormous; and I feel convinced, if it is our endeavour to aid the cause of chemistry in its application to medicine, we shall not do so by suggesting impracticable methods of inquiry, but by continually bearing in mind that our processes of research, whilst accurate, must be easy and simple.

Cambridge-heath, Hackney, March, 1871.

REMARKS
ON THE GUNSHOT WOUNDS OF THE WAR, THEIR NATURE, AND THE TREATMENT ADOPTED IN THE FIELD HOSPITALS.

BY SANDFORD MOORE, B.A.,
ASSISTANT-SURGEON 4TH DRAGOON GUARDS.

(*Concluded from page 478.*)

2. CARBOLIC ACID is known to the German surgeons as an ordinary disinfectant; it is certainly only used by them as such. When a fresh wound comes into a hospital, no attempt is made to destroy and exclude the germs, and to seal it up, but water-dressing is applied for some days; and then, if amputation is not determined on, a pledget of sharpie dipped in strong carbolic oil is placed over the wound; over this a dry piece of sharpie, and seldom a strip of adhesive plaster, with the intention of retaining the dressings. Gunshot wounds of the ankle, shoulder, and knee-joints are all treated in this manner. To dress a stump the "krankenträger," or sick attendant, pursues the following rough process:—He commences by taking off the old dressings; then leisurely, having discovered some water, he conveys this in his "einspritze" to the bedside. If the patient has a nozzle of his own, this is placed in the india-rubber tubing of the "einspritze," and the wound is then syringed out by the simple elevation of the zinc vessel to which the tube is attached; if he has not a nozzle of his own, his wound gets touched and washed out with, perhaps, one that has just been going through the same process in a gangrenous stump close by. After this washing process, a piece of fine linen, perforated with numerous small holes and soaked in strong carbolic oil, is placed over the wound; then a pad of dry sharpie, tow, or cotton-wool; and finally, to retain the dressings and sustain the stump, the triangular bandage of Esmarch over all. In the same manner the surgeon applies his first dressing on the operation table; using the acid thus in the light solely of an ordinary disinfectant, and not as an antiseptic, for no attempt is made to destroy or exclude the germs causing putrefaction in these stumps or wounds. It is used too strong (varying from 2 to 3½, and even 5, parts in 10 of oil)—strong enough to strip the vicinity of wounds, especially those of the trunk, as I have seen in more instances than one; in fact, acting here as an escharotic.

This, however, was the first war for the Germans to make use of carbolic acid. *Condy's fluid* and other disinfectants had been used in 1866. Unquestionably they think very highly of it; and different results may be expected when all its properties are called out. No fair trial has been given to it in the late war. When the circumstances of campaigning admit of the antiseptic treatment of injuries, with those recently wounded its use will be very great; but for wounds of some days old I have found it no better than Condy. Hence in war time its usefulness must be greatly curtailed, owing to the difficulties placed in the way of its proper application to recent wounds.

Marine lint has proved an excellent dressing—a ready, deodorising, absorbent application to wounds profusely suppurating and offensive; but that sent out during the war was too coarse and lumpy for application to bed-sores or dependent parts, owing to the men finding it too hard to lie upon.

3. A few words now upon Splints. In the first place, there was a great scarcity of them on all sides. For gunshot wounds of the leg or foot, either for treatment in hospital or for purposes of evacuation of the same, I have seen no splint as useful, or to the purpose, as the "Drahthose," or iron-wire splint. This is a light splint, constructed of strong, unpliable iron wire, the strands an inch or more apart, and arranged both longitudinally and transversely. It is for all the world like a commodious iron-wire boot, from which is cut away the part overlying the extensor aspect of the foot and leg, allowing of the ready introduction or removal of the extremity. Although not pliable, the edges can be approximated a little, and retained so by a few twists or lacings of a bandage. Dressings can be applied without necessitating the removal of the splint, and by its height over the limb and strength it forms its own cradle. A log of wood or brick placed at either side steadies the apparatus. The same splint elongated would answer admirably for the transportation or treatment of gunshot wounds of the upper third of the thigh.

Smith's anterior splint is likewise deserving of a place amongst those destined for service in warfare. I have seen it doing good service in Orleans.

4. Esmarch's bandage, and the "einspritze," I would now notice amongst the special appliances in Prussian hospitals.

The "einspritze," or syringe, is a very valuable assistant where there are many wounds to be dressed. It is a zinc vessel, cylindrical in shape, and made of different sizes. The top is open, and without a lid; near the bottom of the vessel there is a small spout of the same metal, which is sufficiently long to give attachment to one end of a long piece of india-rubber tubing; the other, or free end of the tubing, is made to embrace a short wooden or bony nozzle (one of which, it is intended, should be possessed by each patient). To arrange it for use, the vessel is filled with hot, cold, or medicated water, care being taken to place the nozzle through a small handle near the top of the vessel and above the level of the water. When the surgeon is ready, he takes the nozzle between his fingers; at the same time the assistant elevates the vessel the requisite height, according to the force of stream required; the flow is then directed on the surface, into the interior, and all about the wound, washing it out thoroughly. This is very cheap, very simple, and really invaluable at amputations, or where there are bad wounds. The waste water as it flows away from a wound is generally caught or received by small tin dishes, in outline resembling the longitudinal section of a kidney, and shallow. These are of great use for another purpose—washing wounds of the trunk; for, owing to the lateral depression, they can be approximated very closely to the surface of the body, and so prevent the usual wetting of other parts, and the patient's linen.

Esmarch's bandage is universally adopted in the hospitals; it is three-cornered, and forms an isoceles triangle, the base of which is much longer than either one of the sides. It is intended to supersede the ordinary roller, and in fact every other form of bandage. It is easily applied. Prof. Esmarch, of Kiel, the inventor, in his work on the subject, gives illustrations of its mode of application to all forms of injuries, and in all regions of the body. For the retention of scalp dressings, wounds of the neck, trunk, and extremities, or as a sling for the upper extremity, it is exceedingly useful, readily made, and quick in application.

As a means of retaining the dressings of a stump, and giving the requisite support at the same time, it has not been found to answer. To explain this, a word as to its mode of application. The extremity being elevated by an assistant, and the bandage opened out, the base of the bandage is drawn up under the stump, so as to bring its central point opposite the centre of the triangle; then the corners are brought together on the anterior surface of the limb, and when the apex of the bandage is carried over the face of the stump, and laid under the corners, they are tied in a reef-knot, the apex of the bandage being turned over, and pinned down on the knot, or a point a little way below. If these corners are not tied sufficiently tight, the dressings are found not to be retained in their place; whereas, if the corners are tied tightly, greater pressure all round the limb at that point is the result, and a sort of semi-strangulated condition of the parts below follows. It was found requisite, therefore, in dressing this sort of cases, to fall back upon the roller.

I would add a few words on the "küssen" of Stromeyer, for fractures of the upper extremity, and the chloroform bottle and inhaler, but I fear I have taken up too much space already.

Albany-street, April, 1871.

ON THE

THERAPEUTICAL ACTION OF QUININE ON MALARIA.

BY GOPAUL CHUNDER ROY, F.R.C.S.

WITH all the boasted researches of modern medicine, the action of quinine on malarious fevers still remains an enigma to solve. The same empiricism which at first introduced this valuable medicine in practice yet actuates the practitioner to prescribe it in blind acknowledgment of its remedial powers. No time, therefore, can be said to be unprofitably spent that is devoted to discuss the topic, How does quinine influence the system? To enable us to comprehend its mode of action, I will take the liberty to advert for a moment to my views on the nature of malaria. It is a subtle poison manifesting itself in certain symptoms which primarily consist of derangement of the functions of the ganglionic nervous centres. The stage of incubation, in which the general malaise, languor, chilliness, and altered secretions, are the marked features of complaint, would afford proof in support of the statement. Nor do the symptoms of actual invasion add less weight to the assertion when we observe the peculiar altered balance of circulation manifested in the cold and hot stages of fever under its influence. The circulatory apparatus of our organism is under the direct control of the sympathetic system; and we can easily understand how an influence exerted over the latter would modify or alter the governing power. The tendency to rapid death by asthenia from the concentrated action of malaria on the system is borne out by experience in the fresh outbreak of an epidemic; and the inflammations of different organs from the same cause, as meningitis, splenitis, hepatitis, dysentery, &c., are further evidences of the weakening influence of the poison on the local circulation of blood, inducing perverted nutrition in organs probably predisposed to such attacks. When the poison falls short in its virulence, changes in the nutrition of structures occur, which are physiological as far as the process of hypertrophy is concerned, but become of pathological significance on account of their unnatural growth without any apparent demand or necessity in the economy. Thus the large ague cake, and elephantiasis of the scrotum, leg, or forearm, although they are consistent with perfect health of the individual, yet no doubt are deviations from the natural standard, which, carried beyond an ordinary size, become a source of danger and an incumbrance. To sum up, then: the effect of malaria is primarily spent on the organic system of nerves, especially on the parts governing the circulation and nutrition of our body, producing the various phases of alterations evidenced in hypertrophy, inflammation, and death, according to its degree of concentration and virulence. It has a tendency to weaken or paralyse the walls of the bloodvessels, and favour their dilatation and engorgement.

Quinine is admirably adapted to counteract the influence of malaria by virtue of its tonic effect on the sympathetic system. In enfeebled states of the constitution, it promotes digestion and secretion and gives tone to the heart; under its use the pulse becomes smaller but stronger. In heat-apoplexy with great pungency of skin, its exhibition reduces the temperature of the body by counteracting the paralytic condition of the vessels. In intermittent fever, given before the expected paroxysm, it remedies that condition which causes determination of blood to the skin and the consequent pyrexial symptoms. A large dose acts just in the same way as smaller doses repeated at frequent intervals, but with greater energy and certainty. Probably in such instances the former is the more efficient mode of administration; for, inasmuch as the attack ushers itself in a sudden outburst of symptoms, it stands to reason that a stiff dose would be more effective in obviating the tendency. This view will enable us to discard the assumption which ascribed the beneficial action of quinine in such cases to the unknown agency of "shock." It has no peculiar virtue on malarious poison, and, given with the belief that it removes the malarious taint of the constitution, it often fails in attaining that end. Hence the notion is gaining ground amongst practitioners that, although quinine will cut short a paroxysm of fever, it does not cure it. Its use can be extended to other diseases where the same defective power is observed, irrespective of malarious origin. Thus in idiopathic and surgical fevers, in burning of the palms of the hands and soles of the feet, and like diseases of perverted circulation, it would prove an invaluable remedy; but when the condition of the part merges into the pathological state of inflammation, as in meningitis or dysentery, I hold its curative power to be at best doubtful.

Glasgow, Feb. 1871.

A CASE OF

PERFORATING ULCER OF THE STOMACH; RECOVERY.

BY T. TINLEY, L.R.C.P. EDIN., &c.

I AM induced to forward the particulars of the following case of recovery after perforation of the stomach, it being similar to the one recorded by Dr. ROSS, occurring in the North Staffordshire Infirmary, and published in THE LANCET of Jan. 21st. As I have not any notes of the case, I have to rely entirely on my memory, and can only give the line of treatment pursued, regardless of dates.

I was sent for on Nov. 21st, 1868, to visit Mrs. B——, who had been taken suddenly ill. On arriving at the house I found her in a state of collapse, with a quick, scarcely perceptible pulse, pallid, and covered with cold clammy perspiration. There was constant retching, but no vomiting of any account, merely a small quantity of grumous fluid, having the appearance of blood acted on by the gastric juice. I remained with her some time, and gave her a dose of opium. I found, on inquiry, that for some time she had complained of a burning pain coming on shortly after taking food. The pain was at a fixed point in the epigastric region, shooting through to the back, accompanied by nausea, but only occasional vomiting. She had never sought relief, thinking it would get better. On the morning of the 21st, while preparing dinner, she was suddenly seized with severe pain in the epigastrium, causing her to scream violently, which she continued to do at intervals for some time. Fomentations were applied to the abdomen constantly, and a grain of opium given in pill every third hour, which procured very little rest, and only partially relieved the pain.

On the second day after the occurrence of the above symptoms the pain had extended over the whole abdomen; the knees were drawn up, the pulse became very high and wiry, the countenance anxious, and, in fact, all the symptoms of acute general peritonitis set in. I ordered a turpentine stupe to the abdomen, to be followed by hot fomentations; and beef-tea and brandy injections every fourth hour. Neither liquid nor solid was taken into the stomach for

above a week. Her thirst was relieved by gargling with cold water. The stupe and fomentation relieved her to a considerable extent, and she gradually but slowly improved; but up to Dec. 11th the abdomen remained tympanitic and painful on pressure. I then ordered a blister to be applied over the whole abdomen, after which she progressed rapidly, and has been in good health ever since.

I am inclined to look on the above as a clear case of gastric ulcer ending in perforation; for although the symptoms of ulceration had not been so well marked as they sometimes are, still the pain occurring shortly after taking food, aggravated by hot liquids, such as hot tea; the burning character of the pain, shooting through to the back; the sudden occurrence of excruciating pain, first in the epigastric region, followed by general peritonitis,—leave little doubt as to the nature of the case. I believe the favourable termination of the case is to be attributed to its occurring at a time (just before a meal) when the stomach was, in all probability, almost if not quite empty, the previous meal—breakfast—being very likely composed of food easily digestible.

Whitby, Yorkshire, January 25th, 1871.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARY'S HOSPITAL.

A CASE OF PSEUDO-TONSILLITIS.

(Under the care of Dr. HANDFIELD JONES.)

L. T——, aged twenty, had been taken ill a week before admission with a sore throat, which had become so severe that she could swallow nothing but liquids. When she was asked to show it, the neck muscles were thrown into rigid spasm, the tongue was raised, and behind it nothing could be seen but the uvula projecting forwards between the approximated upper extremities of the tonsils. She was ordered to take twenty minims of tincture of belladonna every hour for three times, and afterwards every two hours, and to inhale steam. On the fourth day she felt giddy and her face became flushed; the belladonna was consequently withdrawn. She had, in the twenty-four hours, passed only six ounces of urine, of a specific gravity of 1023, not albuminous, but depositing copious lithates. On the fifth day the tonsils, as seen internally, were not at all diminished in size, but the finger applied externally to the angle of the jaw could detect scarcely any swelling. Various medicines were then tried, with very small results. Thirty-five days after admission the following note was made:—"She does not mend at all. Her voice is squeeky; her throat is still sore, as she says it has been on and off ever since she had the scarlet fever three years ago. She opens her mouth but little, and all that can be seen is the uvula pushed forwards over the base of the tongue; the tonsils cannot be seen." On introducing his finger, Dr. Jones found that he could move it freely from side to side between the tonsils, and formed the opinion that they were but little, if at all, enlarged, but merely drawn into close approximation by spasm of the superior constrictor of the pharynx. Up to this time the patient had kept her bed and been very "invalidish." The intelligent ward-sister declared that she "could not make her out at all." A draught containing five grains of carbonate of ammonia and a drachm of tincture of valerian in infusion of valerian was then ordered to be taken three times a day. Three days later the patient was up and about the ward, and seemed much better; but on examining the throat in a good light Dr. Jones found the uvula projected forwards just as on former occasions. By means of a little careful training having taught the patient to breathe in and out while showing her throat, he contrived to get a view of the back of the pharynx, and satisfied himself that, though they were rather too red, the tonsils were really but very slightly enlarged. In a few days more the patient left the hospital in an improved condition.

The appearance of the patient's throat was extremely deceptive; and Dr. Jones admitted that he might not have apprehended the actual condition of the parts if he had not called to mind an observation he made on another patient some considerable time previously. In that case he saw the tonsils distinctly drawn together by muscular action whilst the patient was under examination. He did not for a moment believe that this woman was lending herself to an hysterical tendency, but attributed her symptoms to a hyper-excitable condition of the nerves and muscles of the neck and throat, which was aggravated by some catarrh of the mucous membrane.

The toleration of large doses of belladonna, and the inconsiderable amount of toxic effect which they at last produced, added interest to this case. Hyperæmia of the head and face, a very moderate elevation of temperature, slight cerebral disorder, and great diminution of the urinary secretion, were the principal changes that ensued. The dysphagia was lessened, but by no means removed. The drug had no diuretic, but quite the contrary, effect.

HOSPITAL FOR SICK CHILDREN.

NOTES OF A CLINICAL LECTURE ON CHOREA.

(By Dr. DICKINSON.)

DR. DICKINSON commenced his lecture by giving a brief account of the affections closely allied to chorea, which have attracted attention at different times, and acquired separate names—namely, the dancing mania of St. John, which spread from Aix-la-Chapelle to Cologne, Metz, and Strasburg; the Tarantula dance of Southern Italy; the "Convulsionnaire," of France; and a similar affection which is observed among the natives of Abyssinia. He showed that these diseases were dependent on an intimate connexion between the intellectual faculty and the voluntary muscles, and that the infection spread mainly by imitation. He also suggested that the phenomena observed in the Jumpers of Cornwall and the Shakers of the New World to follow the reception of powerful religious impressions are likewise allied to chorea.

Directing attention to the *cause* of chorea, he said that it could in a large number of instances be traced to fright, and adduced the evidence of a number of cases which he had brought down from the wards for purposes of demonstration. Another, but less frequent, cause was irritation, arising from an unhealthy condition of some part of the body, such as a loaded intestine or an irritable condition of the uterus. A case in point was that of a girl sixteen years of age, who had died of an attack of chorea. The cervix uteri was found to be in a state of intense congestion, and the os was covered with a membrane resembling that of diphtheria; there were also traces of recent endocardial deposit. The pathological connexion between chorea and certain conditions of the heart and lining membrane Dr. Dickinson was inclined to attribute to a peculiar condition of blood, which is favourable to the deposition of lymph, and tends also to induce congestion of the cerebro-spinal system. With regard to the age at which chorea most frequently occurs, the hospital registration was said to show that children between the ages of six and fourteen are most liable to it; but it was not purely a disease of childhood, though after puberty the frequency of its occurrence decreased with advancing years. One case which Dr. Dickinson mentioned was that of an old man, sixty-four years of age, who became violently affected on learning the death of his master.

Turning to the *symptoms* of the disease, Dr. Dickinson said that it had been well defined as an insanity of the voluntary muscles; the only involuntary muscle liable to be included in the morbid influence was the heart, which was histologically a near ally of the voluntary muscles. He thought that, nevertheless, the heart is not usually affected prima-

rily like the other muscles, but influenced secondarily by the endocardial deposit. As to the parts chiefly affected, he said that, as would be expected, they were those which are principally governed by the centres in which the intellectual faculties preside, and that accordingly the muscles of the upper extremity were first and chiefly affected, those of the lower extremity being later affected, and to a less degree, and recovering earlier. Examples were then given of some of the less obvious developments of this disease: among these were the cases in which the only symptom is a peculiar barking or some other inhuman sound produced by irregular action of the laryngeal muscles; or a peculiar and violent spasm of the orbicularis, most frequent in old age, which makes the patient wink violently; another was that of a woman whose head turned slowly over to the right shoulder, and remained there until guided back with the finger placed against the chin, and returned immediately in the same manner when the finger was removed.

With regard to the *course* of chorea, Dr. Dickinson said that, unlike the specific fevers, it had no tendency to end within a definite time, and was not generally fatal. The cases which do end fatally were said to be almost always those in which the movements produce excoriations on the prominent parts of the body which they would not allow to heal, and perhaps also keep the patient from sleep. Under these circumstances he would be found to fall into a condition which is characterised by dryness of tongue and rapid pulse, and differs only from that which results in typhoid fever in the skin remaining cool.

Dr. Dickinson professed himself unable to throw any new light on the *pathology* of this disease, other than that which might be yielded by one of the specimens he was about to show. He was inclined to attribute the cardiac complications of chorea to the hyperfibrinous condition of blood already alluded to, rather than to a genuine inflammation. They were unquestionably liable to occur, no matter from what exciting cause the disease arose, whether from fright, worms, or a loaded condition of the bowel, and whether or not it followed or was accompanied by distinct rheumatic affections.

As to *treatment*, his faith in most of the drugs of which trial had been made was very limited. Most patients improved more or less during the first fourteen days, if merely placed in bed and kept at rest; but if within this time recovery did not take place, medicinal treatment must be resorted to. First it would be well to give a sharp purgative of calomel and jalap to ensure the removal of sources of intestinal irritation, and then one of the metals which experience had shown to be of value. Of these the most useful were the sulphate of zinc and iron in some form, the former applicable to florid and robust patients, and the latter to those who are anæmic. The administration of the salt of zinc should commence in doses of one grain every six hours, which should be increased by a grain daily up to from twenty to twenty-five grains. When thus administered the emetic effect was avoided, and the majority of the cases to which it was applicable would recover. But if, on the contrary, the case should become chronic, a nervine tonic would be demanded, and of these the best were arsenic and strychnia; with these might be advantageously combined change of air and gymnastic movements, and in those cases which presented an hysteric element, the sudden application of cold, as, for example, by means of the shower-bath. Speaking of music, which has been said to be of value in the treatment of the Tarantula dance, Dr. Dickinson said that the connexion existing between the sense of hearing and the action of the voluntary muscles suggested an explanation of its possible value, and he regretted that it had not yet been fairly tested in this country.

Of the many other drugs which had been suggested for the treatment of chorea, Dr. Dickinson said there were none he could recommend. Sufficient trial had not been made of chloral in the hospital to enable him to pronounce upon it. Antimony certainly had a tendency to effect a marked diminution in choreic movements, if given in large doses; but as chorea, when fatal, proves to be so through prostration, he considered that the use of so lowering a remedy must be unadvisable. Several of the fatal cases which had come within his cognisance had been treated with that metal. Belladonna he had seen given in daily quantities ranging up to seventy grains of the extract without any beneficial effect. He had no faith in either conia or bromide of potassium; and valerian was only of use where chorea is complicated with hysteria.

After the lecture, Dr. Dickinson exhibited a number of microscopic specimens taken from a child who had died of chorea. They showed that the pia mater, the corpus striatum, the pons Varolii, the velum, and the spinal cord—in fact, the entire cerebro-spinal nervous system—was loaded with blood-corpuscles; but the most interesting was a specimen which presented a small cavity in one of the anterior cornua of a portion of spinal cord taken from the lumbar region, the tissues at the circumference of the cavity were softened and broken, and the cavity itself was crowded with blood-corpuscles.

PROVINCIAL HOSPITAL REPORTS.

QUEEN'S HOSPITAL, BIRMINGHAM.

AN ABSCESS TREATED ANTISEPTICALLY WITH CARBOLIC ACID.

(Under the care of Mr. WILDERS.)

J. C——, an infant aged six months, came under Mr. Wilders's care suffering from convulsions of a severe character which had lasted for about two weeks. On the subsidence of these the child seemed quite well for a few days; then the mother noticed that he suffered great pain on moving the right thigh. On examination it was found to be much swollen, red, and shining, and on its being touched the child screamed loudly. Poultices &c. were applied, and in about three weeks fluctuation was detected, and eventually it became apparent that a large abscess had formed on the outer side of the right thigh, extending from the trochanter to within two inches of the knee-joint. The abscess was opened in the most depending part in the following way: the scalpel was dipped into carbolic oil, and a piece of lint thickly covered with carbolic putty (1 in 20) was placed on the thigh; the opening was made through the putty, great care being taken to avoid the entrance of air. About a quarter of a pint of healthy pus escaped, and a portion of lac plaster was placed over the top of the putty, well overlapping its edges, and a bandage over all. On the following day the child had had a good night and was free from pain; the pus trickled by the side of the plaster, and was healthy-looking and free from odour. The dressings were renewed about every other day, care being taken to draw the new ones under the old so as to prevent the admission of air. The discharge gradually became less, and in about three weeks entirely ceased; it had continued to be healthy and free from odour. The child's pain having been relieved, his health rapidly improved; the tongue was moist, the appetite good, and all the secretions were normal; in fact, he did not exhibit one bad symptom. The child is at the present time in perfect health.

BRISTOL GENERAL HOSPITAL.

COMPOUND FRACTURE INTO THE ANKLE-JOINT; TREATED ANTISEPTICALLY WITH CARBOLIC ACID.

(Under the care of Mr. COE.)

WE are favoured with the following notes by Mr. Dobson, the house-surgeon.

M. L——, aged fifty-four, a nervous and fidgety woman, was admitted with a fracture of the lower end of the tibia with fracture of extreme end of the outer malleolus. About two inches of the lower end of the fibula projected through the skin, tucking up and bruising the neighbouring integument. The outer and upper surfaces of the astragalus were visible. The foot was so much turned in that its inner side nearly touched the inner side of the leg. Before reduction could be effected it was necessary to incise the integument freely; the ankle-joint was then syringed out with carbolic acid and water (1 in 30). The wound was closed with sutures of carbolised catgut, prepared oil-silk was placed directly over the wound, and, over this, Prof. Lister's carbolic plaster. On the third day the leg was dressed; a free supply of carbolic acid lotion was kept up during change of plaster; not a trace of suppuration was

visible; the wound was healthy. On the seventh day the dressing was changed again with the same precautions. After this the dressings were changed every fourth day, the wound being carefully irrigated with carbolic lotion during change of dressing. Absolutely no suppuration occurred from beginning to end, and on the sixteenth day the wound had perfectly healed, and the leg was placed in good position on a McIntyre splint.

FOREIGN HOSPITAL REPORTS.

HOTEL DIEU.

NOTES ON M. MAISONNEUVE'S METHOD OF CAUTÉRISATION EN FLÈCHES.

(By Dr. JOHN SPENCER FERRIS.)

DR. FERRIS was not at all favourably impressed with the flèche treatment, and emphatically states that within his observation it did not prevent erysipelas; but, as is shown by the following cases of scirrhous disease, very deep-seated tumours can be removed by its means. M. Maisonneuve claims for this system of treatment the following advantages over excision by the knife:—1. That there is no hæmorrhage, and that no vessels require ligature. 2. That the caustic, being antiseptic, obviates the danger of purulent absorption and of hospital gangrene. 3. That it leaves a healthy, though large, ulcer when the tumour comes away, and that the cicatrisation of this ulcer never causes contractions. 4. That, unlike a wound made by the bistoury, it is in a state of reparation, and covered by plastic lymph, so that all the vessels and lymphatics are closed against purulent absorption.

Operations on Fatty Tumours.—Martin M——, aged forty-three, had one fatty tumour, of half the size of the fist, on each side of the neck, and one on each side of the trunk, just behind the clavicles. He had numerous smaller ones, besides, all down the back. He was a very stout man. Into each of the largest tumours, those behind the clavicles, M. Maisonneuve placed two flèches. On the third day more flèches were placed in each spot. On the seventh day inflammation and erysipelas had spread over the tumours, and half-way down the back; but the pulse was only 84, and the patient was not in much pain. The erysipelas was better on the tenth day; and M. Maisonneuve removed from the holes on each side of the tumours two sloughing masses, which seemed to comprise the whole of their substance, the skin over the middle of the growth remaining unhurt. On the fourteenth day the pulse was 132; the patient had had rigors and seemed ill, though the wound looked healthy. On the seventeenth day the man had had erysipelas again very badly. It extended half-way down the back and up to the hair of the head, and had appeared on the left knee. Two blisters had been applied to the back, and two more were ordered. This was M. Maisonneuve's remedy for erysipelas. He believed that the blisters drew the poison directly from the diseased spot. On the twenty-first day the erysipelas was better; the pulse 96. The patient ultimately recovered.

Old Scrofulous Tumour of the Neck.—The patient was a boy aged fourteen. M. Maisonneuve introduced a flèche into four different tumours—one in front of the ear, one on the side of the neck, and two under the chin,—to "liquefy" the tumours, as he said.—Third day: Pulse 120. There is much pain; patient has had no sleep; has no appetite, but the tongue is clean. Little sloughs are forming at all the points where the flèches were applied. — Thirteenth day: The sloughs have separated, leaving small holes, which suppurate much, and this is all that seems to have been effected; the boy appears to be otherwise in much the same state as before the operation.

Open Scirrhous Cancer of the Breast. — In the case of Annette B——, aged fifty-three, M. Maisonneuve inserted flèches all round the tumour. On the twelfth day the breast sloughed off, leaving a very healthy wound; the patient was cheerful and well.—Twentieth day: Erysipelas has appeared by the side of the wound and on the right arm; the patient is in much pain; the pulse is 120; the wound looks healthy and has a poultice applied to it.—The patient died on the twenty-first day.

In the case of Augustine P——, aged fifty-five, M. Maisonneuve introduced flèches all round the tumour on one occasion, and again ten days later. Four days after the second operation the pulse was 120; there was not much pain.—Seventh day: Pulse 100. A part of the tumour came off yesterday; no pain. — Thirteenth day: The part of the tumour last flèched has not come away yet, but the other part is healing.—Eighteenth day: General health is good. The wound looks healthy; the slough in the middle has not yet separated. — Twenty-first day: The slough has separated.—Twenty-eighth day: The wound is smaller, and looks healthy, but a hard mass remains in the middle attached to the rib. Flèches are introduced into it. When Dr. Ferris last saw the patient, on the thirty-fourth day, the mass in the middle had separated, and the wound was fast healing. The general health was very good, and there seemed great probability of recovery.

Anne H——, aged thirty-nine, had an open scirrhus of right breast attached to the ribs. Flèches were introduced all round it. On the fifth day the pulse was 100; no fever. On the twelfth day the tumour separated, and the wound looked healthy, but a hard mass remained in the middle attached to the rib. On the nineteenth day the mass in the middle came away, leaving two ribs quite denuded of periosteum.—Twenty-third day: Necrosis is going on in the two ribs; the upper one looks as if broken, and projects. Pulse 96.—Twenty-sixth day: The projecting part of the rib has separated, leaving new bone growing from below, and a scale has come from the other rib.—Thirty-second day: The new bone still grows; the wound looks healthy, and continues to heal.

Epithelioma of the Lower Lip. — Gabriel B——, aged fifty-four, was the subject of an epithelial growth, about an inch square, on the right side of the lower lip. Flèches were introduced, in two separate operations, all round the tumour; and for the first four days the patient suffered a great deal, but from that time he experienced but little pain. On the seventh day after the second operation (the ninth after the first) the tumour came away, leaving bare the jaw as far as the lower surface. On the fourteenth day the portion of the jaw which was denuded by the separation of the tumour had become so dry that one could write on it with a pencil. The general health was good. M. Maisonneuve made a new lip from the skin of the adjoining cheek. Erysipelas supervening, this operation did not succeed; it was treated by a blister applied to the face, tincture of aconite internally, a purgative enema, and potage and bouillon only for diet. On the thirty-seventh day the lower jaw was in a state of necrosis; but the patient left the hospital, with a large cavity of the size of two crown pieces in the lower lip and right side of the face.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 28TH, 1871.

JOHN BIRKETT, F.R.C.S., TREASURER, IN THE CHAIR.

ON THE CLASSIFICATION AND TABULATION OF INJURIES AND SURGICAL OPERATIONS IN TIME OF WAR.

BY DEPUTY INSPECTOR-GENERAL T. LONGMORE, C.B., PROFESSOR OF MILITARY SURGERY IN THE ARMY MEDICAL SCHOOL, NETLEY.

AFTER adverting to the practical value which attaches to statistical information derived from surgical experience in time of war, the author proceeded to consider the subject of his paper under five separate heads.

Under the first head, he remarked upon what had been done in this country in respect to the nomenclature and allocation of gunshot injuries in general nosological classification, more particularly commenting on the changes of names and arrangement which have been introduced by the Committee appointed by the Royal College of Physicians of London to draw up the Nomenclature of Diseases which appeared in the year 1868.

In the second division of the paper, the author gave an account of the special classification and tabulation of the statistics of particular gunshot injuries and their treatment in time of war adopted in the British military service; and

afterwards of the official systems employed in the United States and France. He also remarked upon the absence of any corresponding official system of classification in the army medical returns of Germany.

In the third section of the paper, the question was considered how far the tabular statistics contained in the official records of campaigns published in this country, in the United States, and France, can be justly compared with each other; and the author arrived at the conclusion that no such fair comparisons can be instituted under present circumstances.

The fourth division of the paper was devoted to a study of the relative merits of the British, French, and United States systems of classification and tabulation; more especially as regards accuracy and completeness of information, and economy of labour and cost in compilation.

Finally, in the fifth part of the paper, the author urged the necessity for an international consideration of the subject, with a view to the statistical and surgical histories of campaigns being constructed on a general system common to the medical departments of all regular armies.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 6TH, 1871.

MR. GAY, PRESIDENT, IN THE CHAIR.

DR. JOHN PENNEFATHER read a short paper "On Obstructions in the Eustachian Tube, and their Removal." Referring to the anatomy and functions of the Eustachian tubes, he disputed the opinion that the Eustachian tubes are opened only during deglutition; and declared that the opening was always effected during the movement upwards by the velum; that the use of the ducts was to admit air to the tympanum, and allow its passage from the ear, so as to regulate the tension of the drum of the ear; and that they have nothing to do with the conveyance of sonorous vibrations. The admission of air through the tubes was an excellent means of diagnosis; but it was not a means of curing *disease*, though it might remove temporary obstructions, as from catarrh. He then noticed obstruction from cold in the head by viscid secretion found in the Eustachian tube; and this might be relieved by closing the mouth and expiring. Another cause was enlarged amygdalæ, and a tumefied state of the mucous membrane; and, in the latter case, the use of Politzer's bag was injurious, because it admitted cold air and distended the swollen parts. The chief reliance in such cases must be the use of internal remedies that act on the mucous membranes and increase their secretion, and the local use of chlorate of potash spray through the nasal passages.

A discussion then took place upon Dr. Crisp's paper read at the previous meeting, a general agreement being shown by the various speakers as to the desirability of revaccinating very young children, especially during the prevalence of epidemics of small-pox, and also of using the lymph from the arm in revaccination for ordinary requirements. A committee was appointed to report on the subject.

A paper was then read by Mr. W. F. TEEVAN, B.A., F.R.C.S., on "The Pathology and Treatment of Stricture of the Urethra." Mr. Teevan proceeded to point out the importance of detecting a stricture in its earliest incipiency, and that as a rule it was but the fault or neglect of the patient that commencing stricture was not detected and treated. It might be laid down as a rule that if a patient had suffered from a gleet for several months there was always some important pathological alteration, the most serious of which was contraction; and the ball-staff would reveal to us the slightest diminution of the calibre of the urethra. He then pointed out the varieties of stricture and the mode in which they might severally be readily diagnosed, and proceeded to dilate upon the necessity of a greater attention to the use of those means which have for their object the restoration of the canal of the urethra to its normal calibre by dilatation. There was only one method which could be called *the* treatment for stricture—viz., gradual dilatation by the French flexible bougies. He condemned the surgery which did not give sufficient prominence to this particular point; in fact, Mr. Teevan's most able paper was directed to upholding gradual dilatation as against any other treatment of stricture in the vast majority of cases.

MR. MACCORMAC considered the majority of strictures could be well treated by gradual dilatation. If the profession carried out Mr. Teevan's indications regarding the early detection of stricture there would be no necessity for any operative procedure.

MR. GANT used the dilator in a few exceptional cases, but preferred treating the majority of strictures by gradual dilatation.

MR. DAVY had witnessed various methods of treating strictures, and he certainly preferred forcible rupture. He considered the bougie à boule a most valuable instrument.

MR. J. D. HILL approved of the forcible rupture of strictures, and practised it. He had, however, had two deaths after using the dilator.

MR. HENRY SMITH was strongly opposed to the use of the forcible dilator, as its employment was followed by relapses and death. He was entirely in favour of gradual dilatation.

MONDAY, MARCH 13TH.

DR. ANDREW CLARK, PRESIDENT, IN THE CHAIR.

DR. ANDREW CLARK, on taking his seat as President, delivered an address, which was listened to with great interest and attention.

A vote of thanks was then given to Mr. Gay, the retiring President, for his activity and zeal during his year of office; and also to Mr. Barnes, the secretary, whose term of office had expired.

DR. RICHARDSON then read the paper of the evening, entitled "Some further Additions to Therapeutics; Organic Bromides, Metachloral; with a Note on Sulphur Alcohol." The author first described the method of research in therapeutics, which consists in following up modification of certain of organic compounds by modification of the elementary composition of the compound. He then introduced some new medicinal bromides—viz., bromide of quinine, bromide of morphia, and bromide of strychnine, together with combinations of the same. Bromides are best administered in the form of syrups, each drachm of the syrup containing — in the syrup of the bromide of quinine, 1 grain of the bromide of quinine; in the syrup of the bromide of morphia, ½ of a grain of morphia; and in the syrup of the bromide of strychnine, $\frac{1}{12}$ of a grain of bromide of strychnine. Compounds of the syrups of the bromide of quinine and morphia, and of quinine, morphia, and strychnine were also useful. In each drachm of these, the same proportion of dose—viz., 1 grain of quinine, ½ grain of morphia, and $\frac{1}{12}$ grain of strychnine—was maintained. Dr. Richardson had found the bromide of quinine of great service in syphilitic ulceration; he had obtained most valuable results from frequently repeated doses of syrup of bromide of quinine and morphia in cases of neuralgia; and in a case of diabetes the syrup of quinine, morphia, and strychnine had been signally successful. The bromide of quinine he believed the best preparation in cases of remittent or intermittent fever. Dr. Richardson next brought forward bromal hydrate. It was less soluble than chloral hydrate, and produced more convulsive action; and, on the whole, he did not think it could at at all replace the last-named substance. He then passed on to anhydrous chloral, placing before the Society a specimen of pure anhydrous chloral, and by the addition of pure water it produced chloral hydrate. Chloral itself is a fluid caustic; it abstracts water rapidly, and might, he thought, be usefully employed as a caustic in some cases where soft fungous growth required to be removed. Chloral hydrate absorbed would be found to exert an after-sedative influence. A specimen of metachloral was then shown—an insoluble white substance made by exposing chloral hydrate to sulphuric acid. This substance is isomeric with chloral, and when treated with alkaline is resolved into chloroform and formiate of the alkali employed. Administered to inferior animals, it seemed to act as a gentle narcotic, being, probably, slowly decomposed in the body. It may yet prove of service in practical medicine. Lastly, Dr. Richardson exhibited a specimen of sulphur alcohol (C_2H_6S), in which sulphur replaces the oxygen of ordinary alcohol. He detailed a number of interesting facts bearing on the action of this agent, dwelling especially on the mental depression it produces even when

taken in very minute quantities. The alcohol is exhaled by the breath as it passes from the bodies of animals, and communicates to the breath peculiar odours, like the odour met with in wasting diseases. From this fact the author drew a suggestion for a new line of research in diagnosis—viz., the detection of organic sulphur compounds, derived from the blood, in the air expired from the lungs by diseased persons. Sulphur compounds liberated in the alimentary canal seemed harmless—i. e., were not absorbed; but it was now quite certain that when some of them are actually introduced into the circulation, even in minute quantities, and are diminishable by exhalation from the lungs, they produce muscular debility, feebleness of the heart, and mental depression. We may therefore infer that the formation of sulphur compounds within the circulation from diseases, might account for some examples of excessive temporary prostration for the cause of which we have as yet no satisfactory explanation.

Mr. GAY called the attention of the Fellows to a very ingenious contrivance, made by Bower, for allowing a patient with injury of the lower limb to take exercise. It is called the "invalid bicycle." It consisted of a frame on wheels, with a movable rest for the unsound limb, crutches, &c. The patient progressed readily by pressing onward with the sound limb.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 21ST, 1871.

MR. J. HILTON, F.R.S., PRESIDENT, IN THE CHAIR.

Two reports were read: the one on Dr. Hawkes' Cystic Tumour of the Brain, which Drs. Dickinson and Powell regarded as having originated in an aneurism; the other by Dr. Cayley and Mr. Arnott on Mr. De Morgan's case of Lymphadenoma.

Mr. SPENCER WATSON exhibited a small Tumour from the cheek of a woman sixty years of age, which had, in addition to the ordinary microscopic characters of epithelioma, cystic cavities, containing clear watery fluid and free intra-cystic growths. After removal the wound healed kindly, and there had been no return of the disease.

Dr. PAYNE exhibited some interesting specimens of Cancerous Growths in the Veins and Endocardium, apparently secondary to disease in the lower vertebræ. There was thrombus of the inferior vena cava, containing small cells and nuclei coloured by carmine, the bodies of the adjoining vertebræ being cancerous, together with the liver. The endocardial growths were found on both sides of the heart. Dr. Payne believed that the springing up of the growths in the endocardium could not be explained by the migration of cancerous particles, but by infection of the blood-current by fluid derived from the seat of the thrombus.

Dr. DOUGLAS POWELL thought that the endocardial growths were beneath the endocardium; but from this Dr. Payne dissented.

Mr. ARNOTT did not think it necessary to raise the question of the migration of actual cancerous particles, since many cases had occurred where secondary deposits could not be explained by this occurrence.

Mr. HULKE was also unable to see, supposing that an infecting fluid was poured into the blood-current, why certain spots and not others should become the seats of cancerous growths; whereas, if secondary deposits arose from the migration of solid particles, it was easy to understand the fact of one place being affected and another not.

Dr. PAYNE likewise showed a specimen of Diseased Suprarenal Capsules from a case of Addison's disease. With the exception of some slight discoloration of the axillæ, the only parts of the skin discoloured were the penis and scrotum; the pia mater of the cord in its upper part was darkened by deposit of pigment. The buccal cavity, Dr. Payne said, in answer to a question from Dr. Cholmeley, was not examined for discoloration.

Dr. FAGGE mentioned the fact of discoloration of the pia mater having been observed at Guy's.

Dr. GREENHOW said the pia mater was free from pigmentation in some cases. He regarded the disease as a neurosis, and the pigmentation was always intensified after exacerbations of the disease.

Dr. CAYLEY had seen the buccal mucous membrane discoloured without any other symptoms of Addison's disease being present.

The PRESIDENT observed that pigmentation of the skin of the scrotum and penis was common in old people.

Dr. CLAPTON exhibited an Atrophied Cerebellum taken from the body of a female aged thirty-eight, and weighing thirty-eight ounces, being itself hard and deficient in nerve-tissue. Both sides were symmetrical; the pedicles were intact. When admitted into St. Thomas's Hospital the patient exhibited a very peculiar manner and unsteadiness of gait. She was pregnant, and died suddenly. It was ascertained that the patient was well up to the age of four, when she had measles, which seemed to start the development of the disease from which she subsequently suffered. Up to fourteen years of age she could not feed herself or walk well.

Dr. DICKINSON referred to similar cases in which paraplegia was present.

Dr. FAGGE mentioned a case of Atrophy of the Cerebellum, the result of embolism.

Dr. BROADBENT inquired if the patient could speak or write after the age of fourteen, to which Dr. Clapton replied in the affirmative.

Mr. HULKE was of opinion that if the condition of the cerebellum were due to atrophy the skull would not have adapted itself to the cerebellum as it had done.

Mr. MARCUS BECK exhibited a Myeloid Tumour of the Head of the Tibia, which was entirely involved in the disease. The joint was, however, free; and the cartilages were unaffected. Mr. Beck read a full account of the microscopical characters of the tumour. The patient was a sailor, thirty-one years of age, who had some time previously received an injury to the part. The limb was amputated.

In answer to the question of return of the disease raised by the President, Mr. WEEDEN COOKE did not think that myeloid disease generally returned.

Mr. HULKE was of opinion that the more the spindle-cell element was present, the more likely the tumour was to return.

Reviews and Notices of Books.

The Descent of Man, and Selection in relation to Sex. By CHARLES DARWIN, M.A., F.R.S., &c. In Two Volumes. pp. 423 and 475. With Illustrations. London: John Murray. 1871.

[CONCLUDING NOTICE.]

THE difficulties that stand in the way of Mr. Darwin's views may be divided into two groups: first, those which are opposed to the general theory of evolution; and, secondly, those which have a more limited and special application to the development of man from one of the higher mammals. The former class of objections and difficulties has been most ably colligated by Mr. St. George Mivart in his "Genesis of Species"; and we may just allude to the principal ones here, since they of course bear directly on the evolution of man. It is, then, difficult to explain the advantage that would be gained by the *first* slight and rudimentary departures from the ordinary type, even when the perfected organ or ultimate result is obviously extremely beneficial: the advantage, for instance, of the first slight translation of the eyes of flat-fish towards one side of the head; of the early and of the ultimate stages of mimicry; or, in the case of man, of the first deficiency of hair on the body, or the first steps of the passage of the posterior extremities from hands or grasping organs into feet. Such a transition as this last would apparently diminish the chances of escape from its enemies of the animal in which it occurred more than the newly-forming feet would prove of service to it, and would hence lead to its extinction in the struggle for existence. Another difficulty presents itself in the occurrence of special and *singular* modifications of structure—such as the neck of the giraffe,

which, if arising, as supposed, by the "survival of the fittest," might have been expected to occur in other mammals inhabiting the same region. In the case of man, we might take as an illustration the absence of hair, which is so difficult to explain on the theory of "natural selection" that Mr. Darwin is obliged to regard it as a consequence of the operation of a totally different law—that of "sexual selection." Again, even admitting the existence of a certain amount of variability in the various members of the animal kingdom, it seems doubtful whether any chance variations of a beneficial nature would not, unless many happened to occur at the same time, be utterly borne down and overwhelmed by the infinitely greater numbers of the ordinary type into which the variations would speedily merge. A great difficulty exists in the necessity for admitting, in some instances at least, the occurrence of concordant and mutually adapted variations, of which no better example can be given than that of the early parturition and mobility of the larynx of the young kangaroo, coinciding with the development of the mammary gland and of a muscular apparatus for discharging the secretion in the mother. The comparative scarcity of fossil remains indicating the former occurrence of intermediate grades of organisation between many well-defined types—as, for instance, between reptiles and birds, or between bats and other mammals; the stability of species; the infertility of hybrids; and the sterility of the working bees and ants, which can consequently leave no offspring behind them to inherit their habits and instincts,—are also all more or less difficult to explain on the theory of "natural selection." These, with some others, will be found in Mr. Mivart's work. There are others, however, as we have said, that are especially applicable to the view of the origin of man from the Quadrumana. In the first place, Mr. Darwin admits that there is a prodigious interval between the mental powers of the lowest savage and those of the highest ape. It constitutes, therefore, a difficulty to explain how it is that some of the types representing intermediate stages of development between man and the apes have not come down to our day in the living state, or, at least, have not been discovered in a fossil condition; for it is obvious that their progeny, on this theory, could not have succeeded in the battle of life if they had not been themselves better adapted to surrounding conditions than the apes themselves; yet the latter have survived, whilst the intermediate steps have died out and left no trace behind, for it has been shown that the oldest human skulls discovered are not materially inferior in capacity to those of man at the present day. It must be admitted, however, that in regard to fossil information our knowledge is extremely defective, and that those parts of the world which were probably the theatres of the earliest history of man—as Africa and Asia—have been as yet most imperfectly explored with this object in view.

Another difficulty, undoubtedly, presents itself in the enormous lapse of time that this theory requires; for if with their highly-developed brains the independent progress of the savage is so extremely slow as to appear almost stationary, we may reasonably ask what must have been the rate of advance of our progenitors, whilst still low in the scale of organisation, before such an animal as an amphioxus, for instance, could have acquired the psychical attributes of even the lower classes of the Mammalia. The case of the ant amongst the Insecta seems almost to prove too much; for it shows that an increase in activity and in the number and variety of its instinctive powers may coincide with contraction of the brain to an almost infinitesimal size; and it may reasonably be asked, if beings so low in the scale have acquired such powers, how comes it that the far larger and higher development in the brains of the superior animals has not been accompanied by a corresponding increase in their intellectual faculties?

Another point, also, to be noted is, that our knowledge of the variability of the higher apes is extremely limited, and that for anything we know to the contrary, their organisation may be as inflexible as is that of the goose amongst birds. The whole of the evidence appears to show that the varieties of man are not specific, but only racial: the essential proof of which lies in the circumstance that every race is capable of producing fertile offspring with every other; while we know that there are very great physiological obstacles to the intermixture of distinct species, for not only are the adults in such crosses infertile, but it has been shown that an extraordinary fatality attends the early stages of development.

The weakest, as it is the most important, link in the whole argument, is the account of the mode of development of the moral sentiments—a subject that has received very inadequate treatment at the hands of Mr. Darwin. It is on this point, we apprehend, that those who hold and those who oppose Mr. Darwin's views on "natural selection" will diverge. Many enlightened men beyond the limits of our profession, and with little knowledge of anatomy and physiology, will be disposed to admit without questioning the truth and accuracy of all Mr. Darwin's propositions in regard to the unity of type perceptible in the bodily organisation of man and the lower animals; but we apprehend the great majority will at once dissent, without the production of much more varied and profound evidence than Mr. Darwin has adduced, from his view that man's psychical endowments are in any way comparable with those of even the highest apes. The very conditions of life require the possession by every animal of a certain degree of reasoning power, or of that kind of intellectual endowment which is commonly called instinct. Without such power it would be impossible that either the individual or the race should be preserved, that food should be obtained, enemies eluded, or the young reared. These faculties, these instincts, man possesses in common with other animals; but the universal experience of our species leads to the belief that we possess psychical attributes of far higher nature, to which our instincts are subordinated, and which, from the earliest periods of our history, have been considered to be destined to direct and govern our instincts. The facts in our possession are assuredly not adequate to enable us to determine that the inner consciousness of right and wrong is derived from sympathy alone. Mr. Darwin has failed to furnish any satisfactory clue to the mode in which the moral sentiments have been acquired, or how such an animal as an ape, whose whole faculties are absorbed by the observation of external nature, came originally to possess an introspective power, or to be able to call up by spoken words in the mind of another the images of things not seen. In our opinion, Mr. Darwin has still to show that moral sentiments, comparable to our own, exist in animals, even in the highest; and the difficulty of conceiving of an animal acquiring an abstract idea, is, to our minds, at present insuperable. But with this the theory of the descent of man from the ape must stand or fall.

It is of course inevitable that, in the present state of our knowledge, the views put forward on such a subject should in many instances be of a purely hypothetical or speculative character, and should do little more than show that certain facts can be explained on this theory which are difficult on any other. The more numerous these become, the stronger of course is the support which the theory receives; but it must not be forgotten that, where the field for speculation is so wide, different, and indeed opposite, views may be taken of the meaning and value of the same facts. Thus, to take

one instance only, in regard to the bright colours of some fishes frequenting coral reefs, whilst Mr. Wallace conceives that they are thus enabled to escape detection—living as they do where brightly coloured organisms abound—and hence to increase and multiply, Mr. McClelland holds that they are thus rendered more conspicuous to enable their numbers to be kept in check by the birds to which they serve as a prey. We must acknowledge, however, that Mr. Darwin disarms criticism by the candour and freedom with which he adduces arguments in opposition to his views, whilst he displays equal acuteness in disposing of them.

The chapters on Sexual Selection are most valuable and interesting additions to our knowledge, and Mr. Darwin in them fully sustains his reputation as a keen and excellent original investigator of nature; and we regret only that the limits of our space prevent us from considering them in detail; but we have said enough, we hope, to lead everyone interested in the subject to read the volumes for himself.

In conclusion, we must thank Mr. Darwin for having brought together an immense mass of facts bearing on the subject of the Descent of Man, and for having arranged them in a highly interesting manner. At present it can only be said that the ground has been broken, and it remains for future observers, by the careful examination of nature, to modify or annul the conclusions at which Mr. Darwin has arrived. So far as our present knowledge extends, it has been found that species, however they may admit of variation, are yet fixed and persistent. In arguing from the actions of animals to the mental states of which those actions are supposed to be the expression, Mr. Darwin has to put himself behind, as it were, their consciousness, and, for all we know to the contrary, his interpretation of their motives and mental states may be altogether incorrect. Could such animals imitate Balaam's ass, and render us their own account, it might be widely different from that afforded by Mr. Darwin. The *rôle*, again, which he makes Ascidians play in the development of the animal world may or may not be true; but it seems to us to be a matter of pure speculation.

While he has strung together by his hypothesis a number of small but significant facts that seem to point in one direction, it must, in our opinion, be confessed that he has failed to diminish the weight of a large number of other facts that point in an opposite one. Even granting his view to be correct, there are still enormous gaps to be filled up; and, so far as the positive evidence at our command extends, we have no assurance that the results of future discoveries will prove more successful than the past have been in diminishing the distance which removes man from all other animals. Until Mr. Darwin can overcome the strong evidence that undoubtedly exists adverse to his views, he cannot hope to carry conviction to the minds of those even disposed to accept the bold flights of a speculative mind. To those, on the other hand, who would require testimony of the strongest possible kind to substantiate views so utterly opposed to their conception of man's mental and moral attributes, and the responsibilities which the possession of them necessarily entails, Mr. Darwin's array of facts must appear quite inadequate, and his reasoning from them inconclusive, if not altogether false.

Plain Facts on Vaccination. By G. OLIVER, M.B. Lond., &c. London: Simpkin, Marshall, and Co. 1871.

WE are inclined to agree with the author in thinking it more than probable that the prejudice with which a portion of the public regard vaccination is born rather of ignorance of the real facts of the case than of any knowledge of the subject. The author's object in writing this little book was to furnish a simple and reliable summary of facts bearing upon all sides of the question, and in this he has succeeded. The objections to vaccination, and the various disputable points, are fairly put forward, and the subject is, in fact, treated in a judicial manner. The pamphlet was designed for the public, but practitioners who may not have the requisite leisure to refer to the larger works on the same subject, will also find it useful in giving them a handy collection of facts.

Foreign Gleanings.

HYPODERMIC INJECTIONS OF CALOMEL IN SYPHILIS.

THE *Lyon Médical* (Feb. 19th, 1871), quotes from the *Rev. Clin. de Bol.*, 1871, some cases thus treated by Dr. Soresina. Sometimes a couple of injections of calomel suspended in glycerine were sufficient. The cases were eight in number, and ran in the following manner:—1. Complete paralysis of the third pair of the left eye, with a few other syphilitic symptoms; cure. 2. Punctated keratitis, left syphilitic iritis, plastic exudations in the lower part of the pupil, posterior synechia with irregular pupil; cure. 3. Double retino-hyaloiditis, complete amaurosis on the right side, left amblyopia with strabic deviation of the axis of vision when the eye was fixed, and loss of central vision; improvement, with recovery of central vision on the left side, and perception of light on the right side. 4. Syphilitic neuro-retinitis; cure. 5. Double syphilitic iritis with posterior synechiæ; cure. 6. Syphilitic iritis; cure. 7. Posterior syphilitic iritis; cure. 8. Amaurosis on the right side, left amblyopia from progressive atrophy of the ocular extremity of the optic nerve; slight improvement, followed by a stationary condition. These results are so fine that the mind feels in doubt. Nothing but a most detailed account of the cases would be satisfactory.

STRANGE COURSE OF A UTERINE SOUND.

When a medical man introduces, by way of diagnosis, Simpson's sound into the uterus, he hardly expects to feel the end of the instrument just below the umbilicus. Hildebrandt some time ago published two cases (*Allg. Med. Cent. Zeit.*, No. 91, 1868), in which this happened, and the patients were no worse for it. Now we find, in the *Berl. Klin. Woch.* (No. 16, 1870), Dr. Hoening, of Bonn, publishing an analogous case. The authors differ as to the supposed cause of this curious travelling of the uterine sound, Hildebrandt thinking that the instrument had passed through one of the Fallopian tubes, and Hoening that the sound pushed upwards the walls of an atrophied uterus. It would be interesting to inquire whether, in this country, such a phenomenon has been observed. The fear and apprehension of the operator may, however, be easily conceived, when he is under the impression that he has perforated the fundus. Too much care, however, cannot be taken by those who use the sound, for it is no secret that in some instances it has inflicted considerable injury.

TRANSPLANTATION OF BONE.

Will a plug of bone, removed by the trephine from the skull of an animal, when introduced into a hole made in the skull of another animal of the same species, unite with the margin of the just-mentioned foramen? M. Philippeaux (meeting of the Biological Society, February 19th, 1870) tried the experiment upon several guinea-pigs (so long ago as 1860), which were killed twenty, twenty-five, and thirty days after the operation. Almost complete union had taken place. Ollier had experimented in the same direction, but upon the same animals. It would be well if these experiments were not too often performed. But now that transplantation of soft parts is claiming so much attention, perhaps bone will be transplanted in case of ununited fracture or necrosis.

THE FISHY TASTE OF OIL MODIFIED BY COFFEE.

Carlo Pavesi mentions, in the *Journ. de Pharm. de Turin*, that twenty parts of cod-liver oil should be mixed with one of burned and ground coffee, and half a part of purified ivory black. This mixture is placed over a water-bath (50° or 60°) for a quarter of an hour, the bottle being well corked to prevent the escape of the volatile principle of the

coffee. The vessel being removed, the contents are allowed to rest for three days, occasionally stirred, and the whole is filtered through paper. The oil turns out very clear (amber colour), and is to be kept in well stoppered bottles. The smell and taste remind one of coffee with a slight smack of fish, which latter is not at all disagreeable.

HOSPITAL FOR WOMEN.

LECTURES ON FLEXIONS, TORSIONS, AND DISPLACEMENTS OF THE UTERUS, BY DR. PROTHEROE SMITH.

LECTURE II.

OF an extensive review of numerous authors, domestic and foreign, referred to by Dr. Protheroe Smith in his second lecture, however valuable as an addition to the bibliography of uterine flexions, it is enough here to say that during the last twenty years Sir Jas. Simpson, Rigby, Velpeau, Becquerel, Virchow, Rokitansky, and other celebrities have, in their writings, recognised the obvious distinction between the varieties in the direction of the axis of the uterus the result of natural causes, and the abnormal versions and flexions of the organ.

In the treatment of these obliquities and prolapsus of the unimpregnated uterus, whilst recognising the good effected by sounds, pessaries, &c., Dr. Smith expressed some doubt of their advantage. Since he had adopted a combination of general treatment, rest, and avoidance of all causes of excitement, with efficient aid of mechanical appliances *externally*, the employment of internal, and particularly intra-uterine, instruments was found generally unnecessary; and when used, he advised rest, under the watchful care of the medical attendant, and the greatest caution.

To determine precisely abnormal displacements of the uterus, its normal standard of form and position was mentioned—namely, that in nulliparous women the cavity throughout is straight, and though its direction varies considerably, consequent on the alterations of position of the body, the condition of the bladder and rectum, and the occurrence of the catamenia, it is enough to say that the axis of the uterine cavity is identical with that of the inlet or brim of the pelvis; and that of the multiparous uterus is more vertical, or inclined slightly backwards.

With a view of better explaining the causes of these ailments, and so to aid their diagnosis and treatment, the lecturer gave some views of the physiology of menstruation, for which, though in some measure novel, he solicited the unprejudiced attention and the test of practical observation of his professional brethren.

Referring to the publications of Dr. Tyler Smith, he offered some proofs of the existence of a large supply of nerves to the uterus, as shown (in the absence of sensation and volition) by the instinctive power of selection and of embracing the ovaries in menstruation by the Fallopian tubes. So the whole organ contracts when the uterus is stimulated through the abdominal parietes. He illustrated these remarks by stating that this peristaltic form of action in the tubes was witnessed by himself and others in 1848 whilst securing the pedicle in a case of ovariotomy in the Hospital for Women. Viewing the detrusion of the ovule in menstruation to a certain extent as due to suction power of the Fallopian tubes, and its action and that of the uterus as peristaltic, there is a point from which such force is exerted: thus in the erectile functions of the tubes, it becomes extended, and forms a stiffened arch between the ovary and uterus, which latter, with the vagina, owing to the erectile tissue around it, elongates the whole organ, and so facilitates its bending when predisposed by alteration in structure at the points of commissure of the several parts composing the whole uterine canal. When exceeding the limits of nature, such frequent recurring movements create a disposition to abnormal displacements, although, when not in excess, only offering a natural stimulus to the uterus to complete the process of menstruation. Thus the natural movements of the body, essential to its well-being, become in excess productive of disease. So when the primeval law enjoining women to "be fruitful and multiply" is disregarded, the unceasing recurrence of the catamenia (interrupted in the married by utero-gestation and lactation) often imposes penalties of disease. This assertion is strengthened by the fact that uterine disease is frequently observed in the sterile and the single woman beyond the age of twenty-five.

Regarding the vagina, cervix, fundus uteri, and Fallopian tubes as four successive parts of one canal, there is an evident distinction between that portion which lies above the os interum uteri and that below it; and a certain mobility exists between fundus and neck, as is the case in a greater degree between cervix and vagina, or between Fallopian tubes and uterus. Dr. Protheroe Smith observed that the menstrual act consists of suction, erectile action, and peristaltic motion, and that, when uninterrupted by pregnancy and lactation, it is in continuous excess, and tends frequently to produce both dysmenorrhœa and uterine displacements. A common cause of uterine displacements, according to the observations of Dr. Protheroe Smith, not unfrequently exists in the distortions of the bony structure. When, from debility, a loss of muscular power, or from structural disease, deflections of the spine occur, an abnormal position of the pelvis almost invariably results. The natural oblique plane of the pelvis is then changed to one more horizontal, and at times, when there is rotation of the vertebræ, it becomes twisted, one hip being in advance of the other. The lecturer had alluded to the cause of such frequent distortions in women in papers read at the last two annual meetings of the British Medical Association. When the lumbo-spinal curve is thus lost, the bladder, uterus, and rectum become subject to a depressing and deranging force from the weight of the abdominal viscera, causing not only displacements of the uterus, but also irritable bladder and hæmorrhoidal distress, which he explained by reference to the principles regulating mechanical force. To this end the primary data necessary are—first, the centre of gravity of the body when normal and erect; secondly, the angle formed by the spine and pelvis. The first is proved to be for all practical purposes at the sacro-vertebral articulation. The second is an angle of 140 degrees. In the healthy condition this angle is invariable when the body is erect and in repose. When the muscular power which effects this is diminished the pelvis loses its true oblique plane and is tilted upwards, owing to the trochanteric axis upon which it rests being in advance of the centre of pelvic movement—namely, the spinal column. Thus a backward displacement of the pelvic viscera happens, with a disturbance of those forces which have hitherto served to keep in place the uterus, bladder, and rectum, with that freedom of motion required in health. When the pelvis is tilted upwards a redisposition of balance occurs in these parts, with a considerable augmentation of intestinal weight in relation to the organs enumerated. To redirect this weight and rebalance the uterus, to restore the pelvis to its natural oblique plane, is the intention of Dr. Protheroe Smith's "pelvic band." By this the pelvic plane is easily restored to the normal angle of 140°, and the lumbo-spinal arch when lost. Mechanically it is a lever of the first order; the upper part of the thorax used as the power, the lumbar spine being the fulcrum, and the pelvis the weight to be moved. By depressing the pubic portion of the pelvic basin the abdominal walls are made tense, and thus it is also a valuable means of parietal sustentation in pregnancy. Dr. Protheroe Smith, in accordance with these principles, has observed:—1st. That dislocations of the uterus are frequently attended by corresponding displacements of the pelvis and spine. 2nd. When the pelvis is twisted to one side there is at times torsion or latero-version of the organ within. 3rd. When the pelvis occupies a horizontal rather than an oblique plane, retroversion and retroflexion, and less frequently anteflexion, of the womb occur. 4th. These abnormal displacements, with vesical and rectal irritation, *pari passu* increase as the spine-pelvic deformity advances. 5th. In the majority of cases of retroversion and retroflexion the gait is a stooping one, with loss of lumbo-spinal curve, the pelvis being much in advance of the normal standard position. 6th. In this abnormal position of the parts, when of long standing, whilst the extensors of the thigh are atrophied, the flexors are found increased in bulk and strength in order to sustain the increased burden imposed on them—a fact he believed which had not before been noticed.

THE LANCET.

LONDON: SATURDAY, APRIL 15, 1871.

OUR attention has recently been called by various correspondents to the manner in which the surgeons to hospitals in provincial towns are accustomed to act as general practitioners; and we have been asked to express an opinion upon the merits of the case thus laid before us. We are told that these gentlemen compound their own medicines, attend midwifery, extract teeth, and vaccinate; and we are asked, in point of fact, to declare that the discharge of these various functions is derogatory to any who hold distinguished positions in the profession.

On looking round London, however, and taking into fair consideration the qualities and capabilities of the gentlemen who are there widely known and respected as general practitioners, we can come to no other conclusion than that the division of labour which obtains in the metropolis is a matter less of dignity than of convenience. We make no secret of our conviction that the compounding of medicine by medical practitioners would be better abandoned; that any pecuniary gain resulting from it is dearly purchased; and that the difficulties in the way of change are apparent rather than real. But we should be very sorry to subscribe to the doctrine that, while it is derogatory to a pure surgeon to dispense, it is not derogatory to a general practitioner to do so. We lower the whole profession by the suggestion that the bulk of its members may fitly do something which a few of them ought not to do, on no other ground than that these few have been elected, possibly from among better men, to take professional charge of a certain number of sick poor brought together into a particular building. We can quite understand that general practitioners in a country town may desire to relieve themselves, in their own walk, from the competition of hospital surgeons; and that on this ground they would be glad to see an extension of the London system. But at present, we believe, with no or with very few exceptions, a general practitioner is everywhere eligible to become surgeon to a provincial hospital; and, in this fact alone, provincial general practitioners have a real and very great advantage over their London brethren. A young man of ability and energy may go to a country town, may occupy himself there in any kind of professional work that comes to his hand, and is neither prejudiced as regards his chances of obtaining hospital office, nor compelled, if he should obtain it, at once to abandon the occupations in which he has prospered, and on which he is possibly dependent. In London the case is widely different; and, as a rule, the young surgeon who aims at a hospital has no choice but to make a definite election of a certain branch of the profession, and to maintain himself for years, unless possessing considerable private means, by teaching, by literature, or by some other pursuit foreign to the art of healing. In the provinces, moreover, hospital surgeons by no means enjoy the monopoly of operating that they do in London. In every considerable town there are general practitioners outside the hospital who are ready to perform any capital operation that a patient may require; while, in London, men equally capable hold their hands in deference to established custom. It follows that the competition of which our correspondents complain is perfectly reciprocal, and that hospital surgeons themselves suffer from it in their turn.

If we look also at another aspect of the case, it may fairly be doubted whether a supply of so-called pure surgeons for provincial hospitals could be obtained, or at least could be obtained in any other way than by the selection of the most wealthy, instead of the most capable, of the junior members of the profession. The holder of a hospital appointment enjoys no exemption from the ordinary necessities of human nature; and, like the rest of mankind, he must live. The various means of living that present themselves in the metropolis are far more difficult to find in secondary centres of population; and in the latter, moreover, where people's affairs are much known and criticised by their neighbours, a recourse to extra-professional pursuits would tell very heavily against the chances of professional success. On the whole, we think there can be no doubt that the appointment of general practitioners to provincial hospitals, and the custom that they should nevertheless continue their former work, is one that is advantageous alike to the hospitals, to the profession, and to the public.

Is there, then, we shall be asked, no line to be drawn?—and is the provincial hospital surgeon to be entirely undistinguishable from his contemporaries? We would that it were so; and that any line of demarcation now existing were effaced. But we should like to see it effaced by the elevation of the many rather than of the few; and not by the prohibition of midwifery or of tooth-drawing, but by a higher general standard of accuracy, of painstaking, of searching after the truth. The only cogent objection that can be urged against what is called the lower class of professional work, is its tendency to degrade the moral and scientific stature of those who are engaged in it, and to bring down medicine to the level of a trade or a handicraft. The doctor who hastily orders medicine for a case in which he has made no diagnosis, or who pulls out a tooth for an ignorant patient suffering from neuralgia, degrades the profession as much as he elevates it who ministers carefully to the humblest. It is not the nature of the work that defiles a man; but the spirit in which it is conceived and executed.

One thing, therefore, may be done. The surgeons to provincial hospitals may be fairly called upon to set to their less fortunate brethren an example of good and conscientious work in all that they undertake, whether of surgical or general practice, and an example also of high and honourable dealing alike with patients and with other practitioners. And, when the time comes at which their future career seems well assured, they may be reasonably expected to withdraw unobtrusively from the less remunerative forms of practice, and to leave them to those to whom they are more important. To ask that they shall submit to a *lex non scripta* by which they would be at all times debarred

from rendering services that the public require at their hands, is to seek more than the conditions of the case warrant, or than reasonable men would be able to concede.

MR. BRUCE'S Licensing Bill, now that it is fairly before the public, naturally becomes the subject of much and animated discussion. It is open to the manifest objection that it concedes or reasserts a great principle—the right effectually to control the liquor traffic in the interests of health and morality,—and that it then deliberately postpones the application of this principle for ten years, and its thorough application indefinitely, as a sop to interests of a diametrically opposite character. It is said that there are 150,000 publicans in Great Britain, and that their trade, whether good or bad, has been recognised and licensed by law. They enjoy only annual licences; but enormous sums have been sunk on the understanding that no licence shall be withdrawn except for misconduct; and the immediate application of the Government measure would be tantamount to a vast confiscation of property. A learned judge has lately condemned an "understanding," as an attempt to bind one person to a contract which leaves another free; and it is quite certain that any understanding between magistrates and publicans has at least left the latter free to adulterate drink and to encourage drunkenness in a way of which all ratepayers reap the bitter fruits. We cannot bring ourselves to perceive the existence of the understanding mentioned; because it has long been foreseen as inevitable that the licensing system must be dealt with by Parliament; and that evils which have become intolerable even by English long-suffering, must be removed. We do not see that capitalists who have been engaged for years in the promotion of a great social evil are entitled to compensation when the time comes for curtailing their wrongful gains; but, even if this point be conceded, we are quite sure that no possible amount of compensation could approach the cost which another ten years of unrestrained drinking will entail upon the community. In this, as in many private matters, it would be better to pay, and be rid of a nuisance, than to bear its continued pressure after being once thoroughly convinced of its character and effects.

In urban districts, if the Government Bill could be brought into full operation more promptly than Mr. BRUCE has ventured to propose, it would probably be, for the present, a very sufficient measure of reform. It would be necessary to make provision, however, against the creation of a gigantic monopoly by great brewers; and we think this would be best effected by prohibiting any single person, firm, or company from holding the licence for more than one, or at most more than two, of the houses in the same district. We have already far too little competition in the actual supply of drinks to the public; and to produce genuine competition would in itself be no small boon to consumers. Great brewers, moreover, now feed perpetually upon the earnings of an often meritorious class of persons, who embark small savings in a public-house, see their capital gradually absorbed by the brewer, fail, with nothing for any other creditor, and then end their lives in a workhouse. Dr. JOHNSON described THRALE'S business as "a potentiality of amassing wealth beyond the dreams of avarice"; but he had never seen the continuous disappearance and swallowing up of small people which is one of the chief characteristics of the trade in our own times, and which enables it to support in affluence so many distinguished publicists, philanthropists, and men of local influence. If Mr. BRUCE would accomplish anything effectual, he must render combinations of brewers against the public impossible.

In rural districts, however, the Bill seems likely to be far less effectual than in towns. The country beershop is usually neither more nor less than an unmitigated curse to the district in which it exists; and, if there be only one beershop, it will be so far worse than two that it will serve as a clubhouse for all the bad characters of the locality, instead of for only half of them. The peasant has been educated by these houses to like beer exactly in proportion as it produces the sensations of drunkenness; and the brewer adulterates with various narcotics in order to meet the demand thus arising. We were once told by a country brewer, with reference to a public-house to which he supplied beer to the value of £500 per annum, that anything like a cask of good and wholesome drink would be immediately returned upon his hands. Men who agree together to "go and have a pint" hold solemn conference as to the house at which a given outlay will produce the greatest degree of intoxication. They will compare notes, and say that they had a pint at the "Three Crowns" or at the "Magpie," and "felt nothing of it"; while the same quantity at the "White Horse" had made them—whatever may be the local word for being drunk. The landlord of the "White Horse" does not probably poison his beer himself; but he buys from a brewer who understands the value of tobacco and cocculus indicus, or of any other improvers that the intelligent and respectable tradesmen known as "brewers' druggists" have devised in order to satisfy his requirements. A few mouthfuls of the resulting compound contain a sufficient dose of some narcotic to extinguish prudence and self-control; and, as the liquor is almost always highly salted, the poor fools who order it sit and squander their hard earnings, and are either led into crime or go home to ill-use the wives and children that are often wanting the necessaries of life. To leave in a hamlet one such house as this instead of two will be a very small benefit; and, as far as country places are concerned, we think it should be held as a presumption that no beerhouse is needed unless a very strong case can be made out. Even where a beerhouse is permitted, it should be under regulations to promote the consumption of beer at the house of the purchaser, and the landlord should be punishable for the occurrence of drunkenness under his roof.

The Bishop of EXETER has lately pointed out the marked effect of the Education Bill in reconciling everybody to compulsory schooling at the expense of a rate. Legislators have not half enough confidence in the civilising and educating effect of a good law; and we believe there is nothing in which this effect would be shown more conspicuously than in bold and decided dealing with beershops. There is

a parish in a midland county in which there are none of these nuisances. The squire some years ago opened a house of his own, and undersold the pre-existing ones, until all but one were closed. His last competitor was induced to give up the business by being put into a farm; and then the squire's house was closed also. There was no riot; there was scarcely any grumbling; and the parish has been ever since conspicuous for its absence from the police returns, and for the steady, orderly, and industrious habits of its population. A statesman who would crush beershops by a bold measure might have a sharp fight against vested interests—against brewers and their nominees in Parliament and elsewhere. But he would gather to himself the best intelligence and the most genuine philanthropy of the country; and he would in time not only succeed, but would win undying honour as the greatest public benefactor of his generation.

THE conviction of a London medical student for purloining articles belonging to his fellow-students, has drawn from Sir WILLIAM BODKIN, the presiding judge, the expression of a regret "that arrangements such as existed in the Universities were not made for keeping medical students under discipline and control." With all respect to the learned Judge, we must maintain that the necessity for any such supervision as is exercised by university proctors at Oxford and Cambridge is but little called for in the case of medical students; and that practically, in London at least, such supervision is simply impossible. The great majority of medical students are young men who have their own progress too much at heart to need such superintendence, and whose age in many cases would render any "dry-nursing" irksome and ridiculous. The duty of the officers of the several hospitals and medical schools is to endeavour as far as possible to direct the studies of their students; but it is impossible for them to supervise the morals of a large body of young men scattered broadcast over the metropolis. When any infraction of discipline occurs, the authorities of our medical schools are by no means backward in using the very slender powers placed in their hands—the chief of which is communication with the delinquent's home-circle,—nor do they hesitate, as in the case in question, to call in the arm of the law when crime has been actually committed. At one or two London schools attempts have been made to introduce the "Collegiate system"—with residence, cap and gown, chapel, and all the other paraphernalia of an Oxford or Cambridge College; but the medical student is too independent an animal, both by nature and study, to be readily bound by such silken ties, and the success of such schemes is not commensurate with their costliness. We would ask whether the parents and friends of students always act most judiciously towards them in ignoring the temptations to which they may be exposed if left unvisited by friends or home connexions for six months at a time? Teachers of medicine are not bound to stand in *loco parentum*, whatever their good wishes towards their pupils may be; and the influence of home is more likely to deter from betting and race-courses than any amount of marked attendances on stated lectures.

Medical Annotations.

"Ne quid nimis."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the meeting of this Society on Tuesday evening, the first paper read was by Dr. Silver, and contained a very careful and detailed account of a case of retrogressive labio-glosso-laryngeal paralysis. After this had been discussed a short period of time still remained; and a paper by Dr. Robert Lee, on Amputation of the Female Breast, was read next in order. It was very short and yet travelled over a wide range of subjects, with regard to most of which Dr. Lee is hopelessly at variance with the surgical science and practice of the present day. Considering the years and position of the author, it would have been very proper for the Fellows, such a paper having been permitted by the Council to be read at their meeting, to receive it in silence. One or two speakers, however, having briefly expressed their own opinions, and the President having risen to suggest that Dr. Lee should reply, Mr. Spencer Wells moved that the *séance* should be continued beyond the usual hour, as he had observed a movement, as if to speak, on the part of Mr. Birkett. The motion was neither seconded nor put to the vote; but the President acted as if it had been carried, and Mr. Birkett forthwith rose, and assailed the paper in no measured terms. He said no worse of it, probably, than in all strictness it deserved; and he also said much that was good and true, although not interesting or novel, on the main question at issue. But we are sure that we shall express the general sense of the Fellows when we say that Mr. Birkett's assault upon Dr. Lee was in the highest degree unbecoming. The feeling that reverence is due to age may possibly be an irrational prejudice; but it is a prejudice that has strong hold on gentlemen. It is easy to raise a laugh at the expense of a veteran who lags superfluous on the stage; but it would surely be wiser, as it would certainly be more dignified, to deal tenderly with his foibles and to cast a mantle over his errors. If this be true with regard to old age in the abstract, it is still more true of the old age that follows a life of earnest and honourable labour. Dr. Robert Lee, even when he advances unsound doctrines, cannot be fittingly rebuked by a man who is a quarter of a century his junior.

THE ORGANISATION OF MILITARY HOSPITALS.

MR. DALRYMPLE, M.P., having, we suppose, attempted in vain to procure copies of the minutes that have passed between the different War Office officials in regard to the Report of the Committee on the Organisation of Army Hospitals, has at last given notice of moving a resolution, on Monday next, in which he has embodied the principle that, in his opinion, should guide the organisation of army hospitals. Mr. Dalrymple has asked, in effect, whether the army medical men are to be subordinated or not to other departments and branches of the service in the execution of their duties, and in the administration of their hospitals. We can only hope that Mr. Dalrymple will persevere until he has obtained a distinct answer to this question; and, in the event of its being unsatisfactory, that he will not fail to prosecute still further the course of action on which he has entered. Notwithstanding the experience we have had of the wretched system of administration in the French army, and of the collapse of the Intendance and the medical service which it controlled, there is every reason to believe that the authorities are determined to subordinate the medical service of our own army to the military and control departments. A member

of Parliament could render no greater aid to the public service and medical officers generally than by liberating the latter from the control of men who are ignorant of the requirements of hospitals and of sanitary and medical administration. As far as we can understand, the army doctors desire to possess powers equal to their responsibilities, and to administer what are emphatically their own affairs unfettered by the control and interference of those who would most strenuously as well as most justly oppose the interference of doctors in such matters as military discipline, or the manufacture of warlike stores. It is asserted, moreover, that if the medical service were left to conduct its own affairs, a great gain would be attained in point of simplicity, efficiency, and economy. Mr. Dalrymple, if he presses this subject, can fortify his position by an appeal to the experience of two large wars. In the American war the medical department was able to boast of a success that had never before been attained in hospital organisation and the treatment of wounded and sick soldiers. On the other hand, the disastrous results of the French medical system, as tested in the Italian and Franco-Prussian wars, ought to be fresh in the recollection of everyone. These results were predicted beforehand, and they were mainly attributable to the wretched system of subordinating everything medical and sanitary to the Intendance.

THE CORONERS AND SMALL-POX.

WE venture to appeal to the metropolitan coroners for assistance to put a stop to the improper removal of cases of small-pox, and to the defective arrangements for actual removal which are all but universal in the metropolis. Within the last few weeks several patients have been removed from one side of London to the other, a distance of from two to seven miles. The conveyance is generally effected in cabs, in which a reclining posture is impossible, and there is no supply of stimulants or refreshment of any kind for the sustenance of the patients during the journey. A case was removed from Shadwell to Homerton on the fourteenth day of the disease, and in a state which clearly indicated very great neglect. The patient was moribund on arrival, and only survived a few hours. Another case was admitted from Bethnal-green under somewhat similar conditions, and died almost immediately. And in neither of these cases was an inquest held. In justice to the medical gentlemen who certified the propriety of removing these cases, it is necessary to inquire whether these deaths were due to want of judgment on their part, to the manner of removal, or to the distances over which the patients were conveyed. It is imperatively required that measures should instantly be taken to secure the use of proper ambulance carriages, that refreshments shall be administered on the route, and that preparations be made for the reception of bad cases in the *nearest* hospital by the removal of those whose convalescence is far advanced. The Poor-law Board have repeatedly addressed the guardians on the subject, and have recommended the provision of a double supply of ambulance carriages, apparently with very little effect. It is clear that some further action is required. These carriages, if properly made, are expensive; and as there are thirty boards of guardians, and at least twice as many sanitary authorities who require to use them, it is somewhat unreasonable to expect that all should be provided with them. Instead of more than a hundred, twenty well-placed ambulance carriages would amply meet the exigencies of the present epidemic; and if the Metropolitan Asylums Board were authorised to remove patients to hospital, as they are already required to remove them home when cured, the difficulty might readily be met. The managers would have the additional advantage of ordering the coachman to drive to the hospital where beds would certainly be found vacant, and there would no longer be any danger of sending patients to Hampstead and Homerton only to find the hospitals full.

A DOCTOR'S VIEW OF THE ARMY REGULATION BILL.

WHEN political doctors have of late held many consultations on the state of the army, which was declared to be in anything but robust health. The professional representative of the War Office has handed in his prescription in the shape of a Bill. In the opinion of his colleagues, who have joined in the consultations, and shared the responsibility of discovering a remedy, this prescription is to bring about great results. Without any pretence to being political doctors, we may perhaps venture to say that a very grave oversight appears to us to have occurred. England differs from the continental powers in one very important respect—she exercises imperial control over distant colonies, of which India is by far the largest and most important. Now it is perfectly well known that India is a regular, steady drain upon the manhood of this country. Regiment after regiment proceeds on its tour of service there, and the experience of every year proves that the inefficiency from loss of life and health is very considerable. One of the main causes of this is the youth of the soldiers composing our army. All accounts agree in stating that regiments composed in great part of very young men suffer terribly from the effects of the climate and diseases of India during their first year of service in that country. So well established is this fact that, from the Report of the Royal Sanitary Commission on India to the latest official document issued by the responsible medical services, it has been recommended not to send young men to serve in India; but, in the face of all this, we are compelled to do so to an extent that is admitted to be wrong in principle in order to maintain the system of reliefs. But if it be true that army recruits after three years' service in the line are removable to the reserve force, it appears to us to follow that the evil will be vastly increased instead of being diminished. If we are to enlist lads at eighteen, they will only have reached twenty-one years of age by the time they have served their three years, and the consequence will be that our regular army will be mainly composed of battalions of young soldiers. Should this be the case, we have no hesitation in declaring that the loss of health and life in such battalions when serving in India will be something enormous; and we even question whether we shall be able to maintain, under such circumstances, our European force in that country up to the necessary standard in point of numbers and efficiency.

TRICHINA DISEASE.

WE learn from the "Report of the State Board of Health of Massachusetts," just published, that there have been two recognised outbreaks of this disease in that State in 1870; one in Saxonville, and the other at Lowell. A family in Saxonville, consisting of six persons, partook of a dinner of fried fresh pork on February 8th, 1870. It was the only fresh pork used in the family during three months, with one exception. A portion of the meat was underdone, and the members of the family who ate the red and imperfectly-cooked part suffered most. Three escaped entirely, and three were affected, on or about the 15th of February following, with symptoms which in their progress left no doubt of their being sufferers from the trichina disease. All three were the subjects of a long and painful illness, and one died on the 12th of March. Portions of muscle

taken from the dead body—from the arm, thigh, and calf of the leg—proved to be swarming with living trichinæ. No portion of the pork could be obtained for examination, nor could any history of the pig be obtained from the butcher who sold it. He was, it may be remarked, somewhat incensed by the subsequent small demand for fresh pork in the neighbourhood. In the Lowell case the trichina disease was communicated to a family through a smoked ham from a pig raised by a Tewksbury farmer, which had exhibited no sign of disease during its life. The family consisted of father, mother, and six children. The youngest two ate none of it. The father ate some of it slightly cooked, and the rest of the family consumed it raw, cut in thin slices like smoked beef. The first indications of the disease, in all save one, were those of an ordinary cold, followed by fever, loss of appetite, swelling of the face and eyelids, great muscular pains, contraction of the flexor muscles, and other symptoms. It does not appear, however, that any of these cases died. The fragments of ham that remained proved on examination to be filled with living trichinæ. Smoking does not render pork harmless, but heat does; and all that people have to remember is that pork requires to be so well boiled as to be perfectly cooked throughout its whole substance, and that the trichinæ affect the muscle, as the report from which we are quoting correctly states—that is, the lean, and not the fat parts.

CHEMICAL NOMENCLATURE OF THE PHARMACOPŒIA.

THE ever-changing nomenclature of the chemist and pharmacist is a source of terrible perplexity to the student, and indeed to the practitioner also. Prof. Attfield comes to the rescue with a very good suggestion, that the compounds of the alkali metals and alkaline-earth metals, instead of being named as hitherto on two distinct systems, should be named on one—that, for example, instead of salts of potassium and of potash, we should only have salts of potassium; and so with sodium and soda, &c., in like manner. Where similarity between two salts is indicated by identity in all but one of the syllables of their names, that syllable should be at the beginning and not the end of the word, where it would be liable to be omitted by the prescriber; hence he prefers the terms subchloride and perchloride of mercury in place of mercurous and mercuric chloride. Dr. Attfield suggests red and green iodide in place of mercurous and mercuric iodide of mercury; red for bichromate of potassium; subsalts being termed oxycarbonates, oxynitrates, &c., as the case may be; and the tartrated antimony, iron, and sodium preparations, tartrates of antimony and potassium, of iron and potassium, and of sodium and potassium respectively. Dr. Attfield has given a complete table of the names he proposes for general adoption. It appears in the *Pharmaceutical Journal* of the current week.

THE MEDICAL DEGREE OF ST. ANDREWS UNIVERSITY.

IT is well known that the University of St. Andrews has petitioned her Majesty in Council to extend its power of granting medical degrees without the condition of university education. It will be remembered that at present, and by the Scottish Universities Act, the power of granting degrees at St. Andrews, without university study, is limited. Only ten practitioners a year, who must not be below forty years of age, can graduate there on these terms. The university is naturally impatient under such a limitation of its powers, the more so as there is so little in St. Andrews as a medical school to lead students to choose it. The other Scotch universities as naturally object to St. Andrews having restored to it the power of granting degrees *ad libitum*. We must say that we should greatly regret the success of the petition of the University of St. Andrews. We care little about the condition of residence, or a specified curriculum. But to entrust a needy university with the power of giving the highest medical title to all who have been five years in practice, would be to aim a heavy blow at medical education and the value of medical degrees. If a medical degree can be got easily, and without special study, at St. Andrews, students will not consider it necessary to work very hard as students. They will rely on the claims of five years' practice. We are well aware that many men in practice develop a merit that should be rewarded by a medical degree. But the merit should be real, the conditions clearly defined, and the examining authority above all suspicion of pecuniary interest. For the sake of the profession, and of all the other universities which we believe to be anxious to raise the tone of medical education, we trust that the petition of the St. Andrews University will be decidedly refused.

THE GENERAL MEDICAL COUNCIL.

WE understand that Dr. Rumsey, of Cheltenham, one of the Crown nominees on the General Medical Council, has resigned his seat on that board. Dr. Rumsey was first appointed by the Privy Council in November, 1863; and was re-elected in 1868 for the usual period of five years. We are not able to assign any reason for Dr. Rumsey's resignation of an office which he has always filled with assiduity and zeal, having particularly devoted his attention to the subject of State medicine, for which he has succeeded in gaining an official recognition.

The annual list of medical students registered during the year 1870 has just been issued, and shows a total of 1160 new entries in Great Britain and Ireland; the numbers being for England 551 (an increase of 21 on last year), Scotland 341 (an increase of 24), and Ireland 268, with a decrease of 49 on last year's return. We have more than once protested against the waste of £25 incurred by the publication of this list, which is of no use to anybody. At the same time we have hearty commendation to bestow upon the way in which the registration of the students by the General Council is carried out—viz., by official returns from each of the schools. This method, which is perfectly satisfactory in its working, contrasts favourably with that pursued by the authorities of the College of Surgeons and the Apothecaries' Society, who require each pupil to waste several hours of valuable time by going in person to register at those time-honoured institutions. The College of Physicians has long given up all separate registration of students (which for all practical purposes is perfectly useless); and we hope that the College of Surgeons and the Apothecaries' Hall may be persuaded in course of time to dispense with a constantly recurring annoyance to the pupils, which can only gratify the self-importance of their respective beadles.

PSYCHOLOGICAL MEDICINE.

WE are glad to notice that the Council of King's College is prepared to institute a chair of Psychological Medicine, thus following the lead set within the last few years by University College, St. George's, St. Bartholomew's, and St. Thomas's. This direction of the student's attention to the study of mental diseases is much to be applauded, particularly if, as in most of the schools above mentioned, opportunity is afforded of studying insanity in the wards of an asylum. At several London schools now there is also an annual course of lectures on Hygiene or Public Health;

and we venture to suggest, in the interest of the students, whether it would not be possible to do away with, or at least modify, one of the existing summer courses, in order to give time for these very necessary but novel studies.

The course of Forensic Medicine or Medical Jurisprudence is about as unsatisfactory a course as well can be, and is in consequence frequently "put in commission." The lecturers require a little legal knowledge, a little psychical information, a good deal of analytical chemistry (if properly done), and a general knowledge of Taylor's "Principles and Practice." Now, would it not be much better for the student that he should really learn in the laboratory how to detect poisons in organic mixtures than merely listen to a recital of tests by a lecturer who possibly has no practical experience in their use? If the course of Practical Chemistry were made something more than a course of glass-blowing and specific-gravity-taking, and the course of Psychological Medicine were to include the relations of insanity to crime and legal responsibility, the course of Medical Jurisprudence would be shorn of all its value, and might well be numbered among the things of the past.

PURGATIVES IN PERITYPHLITIS.

DR. ANDREW CLARK recently made some excellent remarks, at one of the meetings of the Medical Society of London, on one or two points, specially the use of purgatives in, and the removal of convalescents from, perityphlitis. He related the particulars of several cases in illustration of his observations, which were intended to show that in the early stages of the disease, where there was much general disturbance, with a rise of temperature, quick pulse, hot skin, vomiting and local tenderness, purgatives were almost sure to do harm; that later on, when such symptoms as these had subsided, it was advisable to unlock the bowels with copious enemata, placing the patient in bed with the hips raised, a dose of castor oil being given by the mouth. He remarked that in perityphlitis there was a tendency during convalescence to the reaccumulation of fæcal matter in the bowels, giving rise to a doughy swelling, demanding for its dispersion the use of purgatives; and if these were withheld, then harm might readily result. Another point specially noticed was the inadvisability of moving patients until some time after the disappearance of the actual symptoms of the disease. Dr. Clark averred that a patient ought not to be moved about, and certainly not to take a journey, until at least a week had elapsed after the pulse had fallen to its proper standard, all pain and fever had gone, and the temperature had become quite normal. Dr. Habershon and others who took part in the discussion, agreed generally with the President in the opinion he expressed, and based their remarks upon their personal experience, which they gave at length.

THE DISPENSING AND STORING OF POISONS.

WE are exceedingly sorry to find that the Council of the Pharmaceutical Society has placed itself in a false and undignified position with the public in reference to the proposed regulations for the keeping and storing of poisons. After very careful consideration, some time since, the Council—correctly estimating the intentions of the Legislature on the question, and feeling that, if the Pharmacy Act of 1868 had conferred great privileges upon pharmaceutists, it had also imposed certain obligations in the interests of the public, and remembering, moreover, that propositions were made in the House of Commons, during the passage of the Pharmacy Bill, to impose even vexatious restrictions upon the sale and keeping of poisons, which propositions were abandoned on the tacit understanding that the Pharmaceutical Society should frame a code of regulations, to be approved by the Privy Council, in accordance with the very first clause of the Act—devised certain alternative plans of keeping poisons, which, whilst the adoption of the one or the other would have met very fairly the intentions of the Legislature, at the same time caused as little inconvenience as possible to the pharmaceutist himself. The proposed regulations were also, as has been admitted, such as are actually carried out in one form or other by a very large number of chemists, and certainly by the leading ones. But the childish opposition of the trade has been sufficient to induce the Council, after they have so plainly stated again and again what their duty is, to show the white feather and to break faith with the public and the Legislature. Only one hand—that of the President, Mr. Sandford (and to his credit be this said)—was held up against an amendment submitted at the last Council meeting, to the effect that the issue of the proposed regulations should come before the annual meeting of the Society simply as recommendations. The resignation of the President followed the acceptance of the amendment. The *Pharmaceutical Journal* congratulates its readers "that the question which has for months agitated the Society and the entire trade is thus finally disposed of." We are wholly at a loss to understand how such an assertion could be made whilst the ink of Mr. Simon's recent communications is hardly dry, in one of which he stated that "My Lords believe it to have been the opinion of Parliament that proper regulations are required for the protection of the public"; and in another makes request to the Council of the Society "to make a complete body of regulations, such as the statute contemplates, in regard to the keeping, selling, and dispensing of poisons." The Privy Council will, no doubt, soon disabuse the minds of the members of the Pharmaceutical Society on this point; and if stringent regulations are forced upon them—and they may be quite sure, if Parliament itself takes the matter in hand, they will be sufficiently stringent—the Society will have to thank itself for them.

It is a matter of much regret that so many personalities and groundless imputations have been introduced into the discussion of the question of poison regulations by pharmaceutists; such, for instance, as the statement that articles written by officials of the Society for purposes of their own have been inserted in the medical journals—an assertion which we need scarcely deny. But if such offences against good taste and honour are the first fruits of the improved education of the pharmaceutist, we fear that the latter is hardly calculated to do so much good for the public as the trade boasts. However, it is quite certain that the present opposition to the acceptance of the proposed poison regulations, arising from the selfishness of pharmaceutists, bids fair to materially weaken the confidence which was created towards them on the part of the public by the passing of the Pharmacy Act.

SCURVY.

Two vessels have arrived in the Thames during the past week with cases of scurvy on board, as to one of which an official investigation has been ordered by the Marine Department of the Board of Trade. We again reiterate that it is the duty of the department to publish the result of these inquiries, either in the public journals, or in the form of a Parliamentary paper. No official document relative to the decrease of scurvy has appeared since the Duke of Richmond's Act came into operation, and though we have published annually, since 1868, statistics showing the

actual diminution of this disease, it is proper that shipowners should demand from the authorities at Whitehall proofs as to the success or failure of certain clauses in the Merchant Shipping Act of 1867, that were said at the time to fetter the freedom of commerce. This is the more important because it is rumoured that, when the Merchant Shipping code is discussed in committee, an attempt will be made to abolish those rules and regulations under which lime and lemon-juice is now supplied to the mercantile marine, and so to strike a blow at an important and successful piese of sanitary legislation. We recommend an independent member to move for a return of all ships that have arrived in port with cases of scurvy on board since January 1st, 1868, the day on which the Duke of Richmond's Act came into operation.

THE VOLUNTEER REVIEW.

THE great gathering of our Volunteer forces at Brighton passed off with even less than the usual number of accidents and injuries. Of the review in a military aspect there is no need for us to express an opinion, but we may say that the hospital and medical arrangements appeared satisfactory, although they were on a very limited scale, and could not have been strained by the tests to which they were exposed on this occasion. We confess that we should be glad to see a Volunteer review conducted on a somewhat different principle. There is, doubtless, plenty of pluck in the Volunteer; several of the corps seem to march past extremely well; and the *physique* of the men is good. Where a force breaks down in the field, however, is in the transport, in the working of commissariat arrangements, in the organisation of hospitals, and in the capacity of corps for acting in concert or independently as required. Efficiency in these matters can only be attained by following a plan similar to that of the Prussians—viz., camping out for a time as if on active service, and testing the working of all the different branches of the force as far as this can be done by mimicking the practices of war. Brigade-Surgeon J. Cordy Burrows, 1st Sussex Volunteers, was, as on former occasions at Brighton, in charge of the medical and hospital arrangements, and discharged his duties in this respect, in common with all the medical officers of the force, in a satisfactory manner. There was a large gathering of the medical officers of the different Volunteer corps at the breakfast so hospitably provided by Mr. Burrows, at the conclusion of which Dr. Carr, Surgeon, 1st Kent Rifle Volunteers, on the part of himself and his brother officers, presented their host with an elegantly worked gold snuff-box as an expression of their sense of his courtesy to them individually and of his exertions in the cause of the Volunteer medical service generally.

VACCINATION IN ST. PANCRAS.

ACTING on the suggestion of the Poor-law Board, and with the concurrence of her Majesty's Privy Council, the guardians are about to place the whole of the public vaccination of the large parish of St. Pancras in the hands of a single officer. The Poor-law Board further recommend that there should be a deputy vaccinator, to act for the vaccinator-general in case of illness, or unavoidable absence, or at times of pressure. The parish is to be divided into four vaccination districts, in each of which will be a public station.

We have already protested against this concentration of public vaccination in the hands of one officer. It forms no essential part of the recommendations of the Privy Council, for there can be no doubt that every one of the four St. Pancras districts will readily supply a sufficiency of children for continuous arm-to-arm vaccination. It is unfair to the gentlemen who have held the appointment without the least complaint, some of them for many years, and is, we believe, an arrangement made for the purpose of providing a berth for a gentleman whose services it is considered desirable to dispense with in the workhouse.

THE GENEVA CROSS.

OUR readers will remember that *The Times* correspondent with the German Army at Versailles prophesied that the terms of the Geneva Convention, as at present framed, would have to undergo a rigorous criticism, out of which they would probably emerge very much modified. Amid the scenes of anarchy and bloodshed which are at once the disgrace of the Parisians and the wonder of everybody else, we read of strange things being done under the cloak of the Geneva Convention. A correspondent of *The Times*, writing an account of what he had himself witnessed in Paris, declared that on a recent occasion, during an interval in the firing from Mont Valérien, he had seen a series of ambulance waggons driven at full gallop along the Neuilly road to a barricade surmounted by the Geneva Cross, for the supply of ammunition. It is, to say the least, lamentable, although it is scarcely surprising, perhaps, that the charitable and humane design of those who framed the Treaty should have been so frequently frustrated during the late war and during the present revolution. Men are apt to declare in their haste very much what David declared of his generation, that all conventions are failures and snares. Without going so far as this, we cannot shut our eyes to the grave abuses that can be, and have been, perpetrated under the pretext of succouring the wounded.

THE LEICESTER PROVIDENT DISPENSARY.

THE Mayor of Leicester presided recently at the annual meeting of the Leicester Provident Dispensary. The report contains some very interesting details. The dispensary was altered, twenty years ago, from the old form of dispensary with gratuitous admission by subscribers' recommendation. There are at present 8937 subscribing members, and the amount received from them was £1249 6s. 7d. During the late epidemic of scarlet fever the medical officers had rendered great services to the subscribers, and there were dispensed 11,000 more prescriptions this year than last. The number of members allotted to one of the medical officers being full, and another objecting to any increase being made to him, two additional medical officers have been appointed. The managing committee have erected a bath for the treatment of skin diseases, and have opened two new dispensaries for the convenience of the subscribers. All this has been done in spite of a diminished subscription list. The meeting was congratulated on the success of an institution which enabled the poor to contribute to their own medical relief, and prevented them from being obliged to go round begging, cap in hand, for tickets of admission.

COAL AS A RESERVOIR OF POWER.

AN interesting paper on this subject appears in the *Popular Science Review* from the pen of Robert Hunt, F.R.S. One pound of pure coal, he remarks, yields, in combining with oxygen in combustion, *theoretically* an energy equal to the power of lifting 10,808,000 lb. one foot high. The quantity of heat necessary to raise a pound of water one degree will raise 772 lb. one foot; a pound of coal burning should, therefore, yield 14,000 units of heat. Many of our coal seams are about a yard in thickness, and one well-known seam in South Staffordshire is ten yards in thickness, which may convey to the mind some idea of the enormous reservoir of power which is buried in our coal forma-

tions; for a cubic yard of coal weighs about 2240 lb. avoirdupois, and it is easy to calculate on the above estimate the mechanical lifting power it would possess if its theoretic value could be attained. Unfortunately, all our appliances, even the very best, are so defective that we lose far more than we use. A pound of pure coal should evaporate thirteen pounds of water; in practice a pound of coal does not evaporate four pounds, even in the most perfectly constructed steam boilers. The best attempts to produce economy in combustion are perhaps those of Siemens and Crampton. In the former the solid fuel is reduced to gas, which is mixed with a due proportion of atmospheric air, and then burnt; in the latter the coal is reduced to a fine powder, and then blown into a heated chamber by means of a fan blast. By this arrangement the perfect combustion of the coal is produced, and a heat of the highest intensity can be obtained. It was intimated last year in the House of Commons by a member of the Coal Commission that the decision of that body, after a long and laborious inquiry, would be, that there existed in our coal-fields a supply for about one thousand years at our present rate of consumption.

THE EPIDEMIOLOGICAL SOCIETY.

A MEETING of this Society was held on Wednesday last, under the presidency of Dr. Seaton, for the purpose of hearing papers by Dr. Buchanan, Mr. Dyke, and Dr. Robinson on Relapsing Fever. Dr. Buchanan gave a succinct and exhaustive *résumé* of the rise, progress, and decline of the disease in London, and sketched out its etiology in Europe. Mr. Netten Radcliffe, in the absence of Mr. Dyke and Dr. Robinson, read the records of those gentlemen on the phases and statistics of the outbreaks at Merthyr Tydvil and Leeds. The former was admirably drawn up, and is a valuable addition to the papers of the Society. Dr. Stallard made brief remarks as to the progress of the fever at Liverpool, and some pertinent observations were made on the unwisdom of overworking medical officers and nurses during an epidemic. The discussion was continued by Mr. Lord, Dr. Lawson, Dr. Ross, Dr. Gavin Milroy, and others, but wandered considerably from the original subject, and became a discursive conversation on the merits of the contagion theory, and on the various modes in which diseases are propagated.

MR. HEADLAM ON THE LANCET BILL.

IT has been suggested that we might, with advantage, make public the very words of Mr. Headlam's letter on the subject of THE LANCET Bill; and, as that gentleman's opinion is a matter of much interest, we have pleasure in laying it before the profession.

Gilmarley Hall, Darlington, Dec. 1st, 1870.

SIR,—I am obliged to you for your copy of THE LANCET. I have perused the proposed Bill for the amendment of the Medical Council. It seems to me to be founded upon sound principles, though I cannot of course pledge myself as to details.—Yours sincerely,

(Signed) T. E. HEADLAM.

To the Editor of THE LANCET.

It was this letter to which we have formerly referred, and with regard to which the *British Medical Journal* had the impudence to declare itself authorised to say that no such letter had been written.

OUT-DOOR MEDICAL RELIEF IN THE PARISH OF BIRMINGHAM.

THE guardians of the poor of the parish of Birmingham have at length assented to material modifications of their system of out-door medical relief. Not only have they re-elected the five medical officers, this time permanently, but they have decided to establish a central dispensary, in return for which the medical officers surrender £25 a year, their stipends in future being fixed at £175. The detailed arrangements necessary for carrying out the dispensary system have been referred to the Out-door Medical Relief Committee, who will shortly bring up their report for the board's approval. The poor of this large parish have had, fortunately for them, an ex-medical officer upon the board, and he, well knowing the defects of the present system, has pertinaciously pressed upon the guardians the necessity for an alteration. We trust that the guardians will not fail to defer still further to his advice in completing their dispensary arrangements, especially as they are not very likely to get any useful information from the *authorities* at the Poor-law Board.

WESTMINSTER HOSPITAL SCHOOL.

A VARIETY of changes have taken place lately in the teaching arrangements of this school. Dr. Sturges has succeeded to the lecturership on Materia Medica and Therapeutics, vacated by Dr. Anstie, who will in future take the whole chair of Medicine, Dr. Basham reserving himself for clinical teaching only. Dr. Lee succeeds Dr. Sturges in the chair of Forensic Medicine. Dr. Lee and Mr. Davy will give a course of demonstrations on Pathology and instruction in the making of post-mortems. Besides these changes we are glad to hear of the intended formation of classes of students, under separate physicians and surgeons, for special clinical instruction, both amongst in- and out-patients, such classes being specially intended for pupils in their first summer session, this being probably the most convenient time during which they may fulfil the conditions imposed by the curriculum of the College of Surgeons, "of having been individually engaged, at least twice in each week, in the observation and examination of patients." We are pleased to see this effort to carry out improved clinical teaching with practical thoroughness, and wish the teachers of the Westminster Hospital all success. It is high time that something was done to ameliorate the present fearful intellectual destitution of medical students during their first summer session, and we hope that the schools generally will see the advantage of giving a little human interest to a period of academic life which the pupils have hitherto devoted almost exclusively to the senseless and brain-petrifying study of Botany and Materia Medica (*not* Therapeutics).

OUT-PATIENT REFORM AT HOSPITALS.

WE trust there will be a large attendance of general practitioners at the meeting to be held on Thursday next, at the rooms of the Medico-Chirurgical Society, on the subject of Out-patient Hospital Reform. Sir William Fergusson will take the chair at 8 P.M. The general practitioner is most deeply interested in the resolutions then to be submitted to the profession, and it is of the highest consequence that the proposal to inaugurate a general system of payments by patients should be at once and for ever settled.

IMPERFECT VACCINATION.

IT is most desirable that greater attention should be paid to the character of the vaccine vesicle, and that vaccinators should be more careful in giving opinions as to sufficiency of the protection afforded when the progress is not quite normal. In the Homerton Hospital there is now a child eleven months old suffering from small-pox. It was vaccinated seven months ago in three places on one arm, and the mother was assured of the sufficiency of the operation. There are but very faint marks, and although the

disease is modified, the progress has not been devoid of danger. It is certain, therefore, that the vesicle had not pursued its proper course. In all doubtful cases why not follow the example of Dr. Lamb, of Islington, and other vaccinators, and revaccinate at once?

THE BRITISH MEDICAL JOURNAL.

THIS *Journal* has again occupied some of the space devoted to what it calls leading articles, in default, we suppose, of any suitable materials from American sources, by a column and a half of vituperation of THE LANCET. If any of the members of the Association take sufficient interest in the matter, we shall be glad if they will compare the statements made by the *Journal* with the facts of the case; and we venture to think that the comparison will afford them materials for wholesome reflection; possibly, for wholesome action at their next general meeting. For ourselves, we can only decline further to recognise so much as the existence of a publication that has added piracy to its previous claims upon the confidence of the profession.

DR. STEELE, in a statistical account of the patients treated in Guy's Hospital during 1869, shows that the total number of persons who participated in the benefits of that charity in the course of the year amounted to 80,838, of whom 5164 were resident in the hospital, while the large number of 75,647 were treated as out-patients, and were furnished with the necessary medicaments and appliances. The number of parturient women attended at their own homes by students of the hospital during 1869 amounted to 1929, being the highest number with one exception attended in any year since the foundation of the charity. Among the 1929 mothers delivered during the year, five deaths only are recorded, and not one of these was attributable to puerperal causes.

WITHIN the last two or three days, about 150 signatures of graduates have been appended to the nomination paper of Dr. Parkes, in support of his candidature for the vacancy in the Senate of the University of London. This fact needs no word of comment beyond the statement that it fully bears out our remarks on a former occasion as to the certainty of his election.

A COMMITTEE of county magistrates has recommended the appointment of an analyst for Lincolnshire, naming Dr. Lowe, of Lincoln, for the office, with an allowance of £50 for apparatus. At the quarter sessions held last week, the report alluded to was adopted.

ON Wednesday evening next Dr. Stallard will read a paper at the Society of Arts, Adelphi, "On the economical construction of workmen's dwellings, and especially in reference to improving the health and habits of the class." Members of the profession are invited to attend.

WE have received, but too late to be noticed this week, a copy of the Medical Act Amendment Bill introduced into the House of Commons by Mr. Brady. We shall give a careful account of its provisions in our next issue.

THE Metropolitan Asylums Board are taking steps to obtain temporary possession of the *Dreadnought* hospital ship for use as an establishment for convalescent small-pox patients.

ACCORDING to a late census return, there are 74,000 medical practitioners in the United States of America. In 1860 the number was only 55,000.

THE SMALL-POX EPIDEMIC.

THERE is no diminution in the epidemic of small-pox; indeed, the mortality in London and Liverpool is greater than it was for the week ending April 1st, being 77 in Liverpool, and 214 in London. As might have been predicted, the increased number of fresh cases observed a fortnight ago in the South of London has resulted in a large augmentation of the deaths this week; twelve fatal cases have occurred at Battersea. The same observation applies to St. Pancras, where the disease continues to be very virulent. It may thus be seen that we should gain at the very least a fortnight if we had an accurate registration of fresh cases, instead of having to wait till the progress of the epidemic is marked by death. There are now nearly 1500 cases in the Metropolitan Small-pox Hospitals. Every bed is occupied, and the demand for orders of admission cannot again be met. The Metropolitan Asylums Managers have at length turned their attention to the *Dreadnought*, which was visited by a committee on Thursday. We hope that no stupid prejudices will be permitted to interfere with its immediate occupation. There are hundreds of convalescents who might very properly be placed there. The type of the cases admitted in the hospitals during the last fortnight has been very malignant, and there is no diminution of the numbers attacked. In Lambeth there is still an increase.

The following are the numbers of new cases of small-pox occurring in unions and parishes of the metropolitan district during the weeks ending April 1st and 8th respectively:—

	April 1.	April 8.
Bethnal-green	33	28
Camberwell	4	8
Chelsea	1	0
Fulham	6	2
Greenwich	2	8
Hackney	32	43
Hampstead	0	6
Holborn	40	44
Islington	19	41
Kensington	0	0
Lambeth	15	39
Lewisham	0	5
London (City)	12	6
Marylebone	14	26
Mile-end Old Town	12	0
Paddington	16	0
Poplar	7	7
St. George's	15	0
St. George's-in-the-East ...	8	0
St. Giles's-in-the-Fields, and St. George's, Bloomsbury ...	9	5
St. Olave's	22	0
St. Pancras	58	80
St. Saviour's	48	60
Shoreditch	41	0
Stepney	3	6
Strand	7	5
Wandsworth and Clapham ...	42	55
Westminster	0	4
Whitechapel	15	19
Woolwich	4	0
Total	485	497

THE VACCINATION MANIA.

The mania for vaccination and revaccination is rapidly subsiding. The vaccination stations are much less crowded, and there are few adults applying for revaccination. In some districts the house-to-house visitation is completed, and the extra staff of inspectors has been discharged. We have reason for believing that the general result has been that about 5 per cent. of children inspected were unvaccinated, and that a considerable number were not in a satisfactorily protected state. On all hands it is admitted that the proportion of successful revaccinations, even amongst children, has been unusually large. There is at present no evidence that the epidemic of small-pox is subsiding, and it is most important that both public vaccinators and vaccination inspectors should be kept closely to their work.

PUBLIC VACCINATION IN LIVERPOOL.

At the weekly meeting of the Health Committee on March the 30th, Dr. Trench entered into a serious statement of the prevalence of small-pox, and the urgent need for adapting the arrangements for public vaccination to the convenience of working men. He illustrated the need for this by instancing the case of a certain workman who, in consequence of a fellow-workman having died of small-pox, went to a neighbouring station to be re vaccinated. After undressing for the operation he was told that he did not live in the district, and was sent away unvaccinated. Dr. Trench said that the present arrangements were not adapted to the exceptional demands of an epidemic period. He suggested that revaccination should be done in the evening for working people. He gave a striking illustration of the value of revaccination. A bad case of small-pox occurred in a large block of buildings in Silvester-street. He was alarmed, and got a vaccination station established there. He took Mohammed to the mountain. 132 people got revaccinated. Although Silvester-street was in the centre of the infected district, there had only been one case since the special arrangements for vaccination and revaccination were made, and this was in a man who foolishly did not avail himself of the facilities for being vaccinated. In the course of the discussion which followed, a member of the committee reflected on the public arrangements for vaccination, and said that, whereas there had formerly been twelve vaccination stations, now there were only three. Our own doubts as to the wisdom of this reduction have been fully expressed. It did not transpire whether the authorities in Liverpool have fully carried out the Act by appointing a sufficient number of vaccination officers, and prosecuting cases of neglect and violation of the law. Dr. Trench's warnings should be taken, or Liverpool will for weeks or months to come be a place to be avoided.

SMALL-POX IN GLASGOW.

It is extremely interesting to observe that small-pox in Glasgow is already very decidedly on the decrease, although there have been five deaths last week, in place of four the week before. The number of cases under treatment is reduced from 125 to 109, and of these 103 are in hospital. It is thus evidently possible to check the progress of an epidemic by reducing the number of foci of contagion, and the value of abundant hospital accommodation is well demonstrated.

SMALL-POX IN IRELAND.

In Dublin, last week, two cases of a very severe kind were admitted into Sir Patrick Dun's Hospital, and two into the Cork-street Fever Hospital. A girl, aged sixteen, died in the Cork-street Fever Hospital on the 11th ult., and in the return compiled by the Registrar-General it is stated there was no mark of vaccination. In the week ending April 1st, there were seventeen cases remaining in the Belfast Union Hospital, one fatal case having taken place the preceding week.

Correspondence.

"Audi alteram partem."

SCIENTIFIC THERAPEUTICS.

To the Editor of THE LANCET.

SIR,—In Dr. Wilks's letter published in THE LANCET of the 8th inst., there occurs the following sentence: "I confess that for my own part I have been giving up the few small theories which I thought were sufficiently safe to be enforced—as, for example, that it was rational to give a purge and a diaphoretic in albuminuria; but I omit all mention of a reason now since Dr. Dickinson has declared the method to be an unscientific one." Dr. Dickinson, in his work on Albuminuria (p. 88), expressed his objections to the practice of purging and sweating in the following terms: "It is evident, from the want of success which attends this practice, that whatever good may be done by relieving the gland of its work is more than counterbalanced by the evil which results from the misappropriation of the aqueous fluid which is needed to keep the tubes clear."

I continue the practice which is here called in question, and I do so for two reasons: first, because I find that in cases of albuminuria, and especially in acute cases associated with dropsy, to promote the free action of the skin and bowels by well-selected means is usually a very successful practice; and secondly, because it appears to me to be rational and scientific. Dr. Dickinson, in arguing that it must be injurious to direct fluid through the skin and bowels which is needed to clear the uriniferous tubes, apparently overlooks the fact that, in the cases under consideration, there is an excess of fluid in the system in consequence of the scanty secretion of urine. There has been inflammatory engorgement of the renal bloodvessels, choking of the tubes by morbid exudations, a scanty secretion of urine, and consequently dropsical effusion into the areolar tissue and the serous cavities. The tissues are flooded by an excess of retained and misplaced fluid, which does not find its usual outlet by the kidney because the hydraulics of that gland are deranged.

For correcting this disordered condition, for restoring the free secretion of urine, and so clearing the uriniferous tubes, the best remedies are those which tend to lessen the congestion of the kidney and promote the freedom of its circulation, such as dry cupping and hot fomentations over the loins, sometimes local bleeding, warm water baths, hot air baths, or warm wet packing (blanket baths), the copious use of diluents to assist the action of the skin and kidneys, a scanty diet, and, lastly, purgatives. The beneficial influence of external warmth in the treatment of albuminuria is as unequivocal as the influence of cold in exciting, prolonging, and aggravating the disease.

In opposition to Dr. Dickinson's theoretical objection to what he designates "the misappropriation of aqueous fluid" by sweating and purging, I appeal to the notorious fact that in cases of renal dropsy a copious drain of fluid, either by the action of a hydragogue purgative or by punctures or incisions in the legs, is often followed by an abundant secretion of urine. In the wards of the hospital I frequently demonstrate the fact that in many cases of renal dropsy the best diuretic is hydragogue.

Some time since a dropsical patient, with very scanty and highly albuminous urine, had his legs punctured. The punctures discharged freely, and then for several days in succession he passed from a hundred to a hundred and twenty ounces of urine without the aid of diuretics or drugs of any kind.

The practice which has lately been called in question I have found to be successful, and I believe it to be scientific, by which I mean that it is in accordance with what is known of the pathology of albuminuria and the influence of various modes of treatment.—I am, Sir, yours &c.,

Savile-row, W., April 10th, 1871. GEORGE JOHNSON.

To the Editor of THE LANCET.

SIR,—Allow me to thank Dr. Wilks, sincerely, for the kindly and courteous tone of his answer to my very free criticism of his lecture on the principles of therapeutics.

I do not intend to discuss the scientific question any further at present, but I must repudiate entirely any such absurb intention or desire as to "snuff out" Dr. Wilks's opinion "by an article;" nor do I believe that the writer of the article in THE LANCET (which in many respects is written from a different point of view from my own) had any such intent.

On the other hand, I am content with my own share in the controversy so far. I cannot see that Dr. Wilks has answered my arguments at all (particularly those of my second article), though his letter contains, as might be expected, much that is interesting and valuable.

I am, Sir, yours faithfully,

THE EDITOR OF THE "PRACTITIONER."

Wimpole-street, April 10th, 1871.

PIROGOFF'S OPERATION.

To the Editor of THE LANCET.

SIR,—In your impression of March 25th, Mr. Samuel Craddock favours me by alluding to a case of Pirogoff's operation which I exhibited at the Medical Society of London on February 20th, and as that operation has not,

perhaps, found too many advocates amongst us, the publication of his results will doubtless interest all practical surgeons.

The case in question is that of a man aged forty-five who sustained a severe injury to his right foot by the wheel of a locomotive. The soft parts were extensively lacerated, and the phalanges and the metatarsal and tarsal bones were comminuted; even the calcaneus itself was fractured transversely near the cuboid articulation. By the violent traction of the wheel-flange the tissues divided at the operation were found more or less contused and strained, and the plantaris tendon and a portion of the deep fascia on the inner aspect of the leg were so much damaged as to be ultimately cast off by sloughing. I therefore brought the case forward to show that, notwithstanding these injuries, the patient had recovered with a useful limb, capable of bearing the weight of the body, with less than half an inch of shortening, and complete bony union at the end of three months.

Now, Sir, in a given case, assuming the tissues in the line of amputation to be sound, or, if injured, within the pale of recovery, I believe that Pirogoff's operation for obvious reasons is as far preferable to Syme's as the latter is to amputation through the leg; and upon the same principle we must also admit that Chopart's operation is superior to Pirogoff's. But in practice we sometimes find, particularly if the healing process has been tardy, that the extensors of the foot primarily, and the abductors secondarily (for the new attachments of the latter have time to contract and consolidate), take advantage of the severed flexors and adductors, and so elongate and tend to weaken the medium of their new insertion, constituting a form of false talipes equina valgus (partial or complete), which necessitates further surgical attention. Thus for a time locomotion is rendered imperfect when compared with the more speedy results of Pirogoff's operation; and here, without binding myself to any special operation, I think Mr. Craddock's preference deserves consideration.

In regard to Pirogoff's operation, two points are essential to the best results. 1. The accurate adjustment of the bone surfaces. 2. Their retention *in situ*. And I would just remark that the gastrocnemius muscle is of signal service as a retaining power behind, whilst in front we substitute an extensor more powerful than its antagonist. But supposing we fail to obtain osseous union, and the ligamentous medium permits the calcaneus to occupy its original position, I doubt whether Syme's operation offers so serviceable a limb; certainly one of the best results after Pirogoff's operation was in a case of this kind, which I had the opportunity of examining eight years after amputation.

We must not, however, forget that there are several lesions of the calcaneus and its covering which contra-indicate Pirogoff's operation, and here Syme's amputation comes to our aid as the best surgical procedure.

The importance of the subject under discussion must be my apology for the length of this letter.

I am, Sir, your obedient servant,

Guildford-street, April 4th, 1871. JOHN D. HILL, F.R.C.S.

POOR RELIEF IN THE METROPOLIS.

To the Editor of THE LANCET.

SIR,—Will you permit me through your columns to inform the profession that Mr. W. H. Smith's notice of motion to refer the consideration of poor relief in the metropolis to a Royal Commission, adjourned by the transfer of Mr. Goschen to the Admiralty, will come on for discussion on Friday, May 5th; and as it is most desirable, in the interests of the Poor-law medical service, that this motion should be acceded to, I do hope that Poor-law medical officers will not fail to press on such M.P.s as they may know, the desirability of supporting this gentleman's proposition. I would further point out to provincial medical men that, whilst the terms of Mr. Smith's motion limit the inquiry to the metropolis, Mr. Fawcett has given notice of his intention to move an amendment to the effect that the contemplated inquiry should be extended to the whole of the country.

That this motion &c. will be opposed, and that, too, determinedly, by all those who can be influenced by the sophistries of the officials at Gwydyr House may safely be calculated on; it therefore behoves all those members of the profession who are interested in a humane and economic treatment of the sick and other poor, to use that widespread political influence which they undoubtedly possess in support of both these propositions.

I am, Sir, your obedient servant,

Dean-street, Soho, April 12th, 1871. JOSEPH ROGERS.

Obituary.

DR. FELIX VON NIEMEYER.

IT is with much regret that we learn the death of Dr. Felix von Niemeyer, the author of the well-known "Textbook of Practical Medicine" and of a series of Clinical Lectures on Pulmonary Consumption that have been translated by the New Sydenham Society. Dr. Felix von Niemeyer was Director of the Medical Clinique and Professor of Clinical Medicine in the University of Tübingen. On the outbreak of the recent Franco-Prussian war, he undertook the direction of a field ambulance, and contracted typhoid fever, of which, unhappily for the profession and medical science, he died recently at Nancy while in the discharge of his duties with the ambulance. He was a man of considerable learning, and of no little professional eminence as a clinical teacher. Although von Niemeyer's book was, perhaps, regarded in Germany as a good and well-arranged compilation rather than as a very thoughtful and critical exposition of practical medicine, its author was evidently not deficient in originality and intellectual grasp, as the readers of THE LANCET will know from the influence which his views in regard to the relation between hæmoptysis and phthisis have exerted in this country and elsewhere. His death will be regarded as a great loss not to the Tübingen School alone. Like so many of his countrymen during the late horrid war, he fell a victim to his sense of duty while at his work.

JAMES HENDERSON, M.D.,

INSPECTOR-GENERAL OF HOSPITALS TO THE BRITISH ARMY.

THIS officer, who, since his retirement from the service in 1859, has chiefly resided at Jersey, where he died on the 23rd ultimo, had a long and distinguished service as an army surgeon. Born in Glasgow in 1789, he received his early education at the grammar school, and afterwards studied at the University both in arts and medicine. In 1809 he obtained the diploma of the Faculty of Physicians and Surgeons, when, as part of his examination, he wrote a thesis on Injuries of the Head, and some years afterwards he graduated in medicine at the University. On August 4th, 1809, he entered the army as assistant-surgeon. He was at the capture of Guadaloupe, in 1810, for which he received a medal and clasp. He afterwards served in the campaign of 1813-1815 in Lower Canada as acting-surgeon of the 13th Regiment, and was present at the two attacks on Plattsburg. He was in medical charge of the 13th and 14th Regiments through the whole of the first Burmese war, under Sir Archibald Campbell, and was at the storming and capture of Cheduba, the attack and capture of Donabu, Melloon, and Poghmmew, for which he received a medal and clasp. In 1834 he was present at the capture of Coorg, as surgeon to the 48th Regiment, and was senior medical officer of the successful column under General Fowlis, for which he got another medal. In 1842 he served in Affghanistan as surgeon of the 3rd Light Dragoons, and was present at the forcing of the Khyber Pass, the storming of the heights of Juddulluck, the actions of Tezeen, and Kuftkotul, and the occupation of Cabool—medal and clasp. In 1848-9 he served in the Punjab with the 3rd Light Dragoons, was present in the affair of Ramnugger, the battles of Sadoulapore, Chillianwallah, and Goozerat—medal and two clasps. He afterwards served as staff-surgeon of the first class at Corfu and other places. In 1859 he was reluctantly forced to retire, having attained the age at which retirement is imperative in the medical department of the army. He was promoted to the rank of

Inspector-General of Hospitals some years since, was placed on the list of officers receiving rewards for good or meritorious services, and the Faculty of Physicians and Surgeons elected him an Honorary Fellow. Dr. Henderson was an honest, independent-minded man, a strict disciplinarian, but genial and considerate in his conduct, and very much respected by officers and men. He possessed an excellent constitution, which he guarded with a rigid self-denial from pleasurable excesses, and he was tall and commanding in appearance. He married a daughter of Colonel Sheridan, a brother officer, and leaves a family of three sons and a daughter.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Court of Examiners on April 5th and 6th:—

W. A. Garrard, W. Stericher, H. Williams, W. C. Hansell, R. W. Murphy, F. W. Trevor, H. E. M'Kay, E. H. Saunders, J. A. Rigby, and G. F. Masterman, Guy's; H. J. Ilott, F. B. Brodribb, R. W. Leftwich, S. Andrews, P. de H. Haigh, F. W. Strugnell, H. A. A. Nicholls, J. L. Whiteed, Percy Beeson, G. T. Thomas, J. F. Dixon, and Henry Willcox, St. Bartholomew's; James Green, J. H. Morris, G. S. Stanafield, and J. T. Hall, Manchester; T. E. Dakeyne, Westminster Hospital; E. M. Cooke, G. H. Batterby, W. E. Webb, and John Moxon, King's College; A. Lascelles and F. M. Granger, Leeds; A. V. Griffith and Wm. Sunderland, Birmingham; F. M. Evans, J. E. H. Mackinlay, and C. Douglas, St. George's; J. H. Davis, R. Z. Pitts, and Henry Charlesworth, Middlesex Hospital; G. W. Joseph, Liverpool; W. Dyson, H. G. Jameson, Philip Addis, Geo. Bosson, G. A. Davies, and T. C. Lawson, University College; A. H. Laver and H. A. Lawton, St. Thomas's; H. T. Shapley, John Evans, and R. Hopkins, London Hospital; G. E. East, B. M. Schlesinger, and D. Protheroe, St. Mary's; A. W. Orwin, Charing-cross Hospital; Robert S. Mutch, Guy's and Montreal.

Of the 108 candidates examined on April 4th, 5th, and 6th, 23 failed to satisfy the Court, and were referred for a period of three months' further anatomical and physiological study.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on April 6th:—

Batchelor, Ferdinand Campion, Brixton-hill.
Bland, William Charles, Notting-hill.
Gray, George James, Stonehouse, Devon.
Jackson, James, Wootton Bassett.
Spencer, Francis Henry, Chippenham, Wilts.
Wharry, Charles John, Woolwich.
White, Edmund, Park-terrace, Regent's-park.

The following gentlemen also on the same day passed their first professional examination:—

Edw. E. A. Batchelor and Henry Thompson, St. Bartholomew's; Arthur A. Beardsley, Guy's; Francis Wm. Butler, Westminster Hosp.; Henry A. Cockerton and Charles Cogman, London Hospital.

CHRIST'S COLLEGE, CAMBRIDGE. — Mr. Elwes, of University College, London, has been elected to a Natural Science Scholarship of the value of £70 a year; and Mr. Jude, of King's College, London, to one of £50 a year.

MR. WOODCOCK, public vaccinator for St. George's district, Chorlton Union, Manchester, has received £62 from the Lords of her Majesty's Privy Council for meritorious vaccination.

MR. MARRIOTT, of Leamington, has been presented with a handsome silver salver, bearing the following inscription:—"Presented to Charles Marriott, Esq., M.R.C.S., by the Leamington Police Force, as a mark of their high appreciation of his professional abilities, and for many acts of kindness shown to them during the past twelve years.—Leamington, March, 1871."

BEQUESTS, DONATIONS, &c.—Richard Wallace, Esq., has given £1000 to the Samaritan Free Hospital for Women and Children. Thomas Godfrey Sambrooke, Esq., bequeathed £1000 to King's College Hospital; and £100 to the Royal London Ophthalmic Institution. The Rev. Charles Floyer bequeathed £1000 to the Staffordshire General Infirmary. Mrs. Mary Woodiwis bequeathed £1000 to the Manchester Royal Infirmary; and £500 to St. Mary's Hospital, Manchester. Miss Ryland has contributed £500 the Working Men's Fund for the extension of the Queen's Hospital, Birmingham. Miss E. Blaydes has forwarded a donation of £50 to the National Hospital for Consumption, Ventnor.

Medical Appointments.

BLACK, J. G., M.B., M.R.C.S.E., has been elected a Surgeon to the Hospital for Children, Newcastle-upon-Tyne.

BRADLEY, J. K., L.K.Q.C.P.I., has been elected Medical Officer for the Kilmoganny Dispensary District of the Callan Union, Co. Kilkenny, vice W. B. Phelan, L.R.C.P.Ed., resigned.

CAMPLEJOHN, H., M.D., L.F.P. & S.Glas., has been appointed Medical Officer for the Alnwick District and the Workhouse of the Alnwick Union, Northumberland, vice T. Fender, L.R.C.S.Ed., deceased.

DAVIDSON, T., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Tweedmouth District of the Berwick-upon-Tweed Union, vice J. Wilson, M.D., L.R.C.S.Ed., resigned.

DE LA MOTTE, Mr. P. W., has been appointed House-Surgeon to the Royal Westminster Ophthalmic Hospital, vice Wm. Edmund Cant, L.R.C.P.I., M.R.C.S.E., who has been appointed Medical Officer to the St. Pancras Schools at Leavesden.

HALL, J., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Parish of St. Pancras.

HICKS, W. T. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Teddington District of the Woburn Union, vice T. H. Barnes, M.D., M.R.C.S.E., resigned.

HUNTER, T., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed Medical Officer for the Islandshire District of the Berwick-upon-Tweed Union, vice Davidson, appointed to the Tweedmouth District.

LAKE, G. B., M.R.C.S.E., has been appointed Medical Officer for the North Walsham District of the Erpingham Union, Norfolk.

MACLACHLAN, A., M.D., has been elected Physician to the Hospital for Children, Newcastle-upon-Tyne, vice Murray.

MITCHELL, J., L.R.C.P.Ed., has been appointed Medical Officer for District No. 4 of the Parish of St. Pancras.

MOORE, J., M.D., M.R.C.S.E., has been appointed a Surgeon to the General Hospital, Belfast, vice W. MacCormac, M.D., F.R.C.S.I., resigned, and appointed a Consulting Surgeon.

MOORE, Mr. A. J., has been appointed House-Surgeon to the London Hospital.

ORR, Dr. J., has been appointed Assistant Resident House-Surgeon to the East Dispensary, Liverpool, vice E. E. Cass, M.R.C.S.E., resigned.

OSBORNE, J. H., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Southwell District of the Southwell Union, Nottinghamshire, and Medical Officer for the Workhouse, vice R. E. Cooke, M.R.C.S.E., resigned.

PLOWRIGHT, C. B., L.R.C.P.Ed., M.R.C.S.E., has been appointed House-Surgeon and Secretary to the West Norfolk and Lynn Hospital, vice S. M. W. Wilson, M.R.C.S.E., appointed a Surgeon.

REWE, Mr. E., has been appointed Dispenser to the Great Northern Hospital, Caledonian-road, vice P. Cowen, M.R.C.S.E., appointed Assistant Resident Medical Officer to the Islington Workhouse.

SCOTT, P. T., M.R.C.S.E., has been appointed a Surgeon to the St. George and St. James Dispensary, King-street, Regent-street, vice M. Beck, F.R.C.S.E., resigned.

TAYLOR, F. A., M.R.C.S.E., has been appointed Medical Officer for Districts 3 and 5 of the Romsey Union, vice F. Taylor, M.R.C.S.E., deceased.

TAYLOR, Mr. F., has been appointed Hon. Dentist to the Chorlton-upon-Medlock, Rusholme, and Moss-side Dispensary, Manchester.

TREVES, W. K., F.R.C.S., has been appointed Visiting Surgeon to the Royal National Hospital for Scrofula at Margate.

WILLAN, T. H., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the East Preston Union, vice T. Evans, M.R.C.S.E., resigned.

WOOD, R. A. H., M.R.C.S.E., has been appointed House-Surgeon to the Liverpool Ladies' Charity and Lying-in Hospital.

WRIGHT, Dr. C. R. A., has been appointed Professor of Chemistry and Practical Chemistry at St. Mary's Hospital Medical College, vice Dr. W. J. Russell, appointed to St. Bartholomew's Hospital Medical College.

Births, Marriages, and Deaths.

BIRTHS.

GRIBBIN.—On the 6th inst., at Great Edward-street, Belfast, the wife of E. D. Gribbin, L.R.C.P.Ed., L.F.P. & S. Glas., L.S.A., of a son.

PERR.—On the 3rd inst., at Botley, the wife of Alfred Perr, F.R.C.S., of a son.

POCOCK.—On the 7th inst., at Manor-terrace, Brixton-road, the wife of E. W. Pocock, M.R.C.S.E., of a son.

RHODES.—On the 5th inst., at Great Horton, Bradford, the wife of Dr. F. Rhodes, of a son.

SIDEY.—On the 3rd inst., at Queen-street, Edinburgh, the wife of J. A. Sidey, M.D., of a son.

SMITH.—On the 10th inst., at Sandy-road, Seaforth, Liverpool, the wife of Dr. C. Swaby Smith, of a son.

MARRIAGES.

ALLAN—SMITH.—On the 4th inst., at Govan, Richard Allan, Surgeon, to Jane Anderson, daughter of Wm. Smith, Esq.

ROBSON—REID.—On the 6th inst., at Rock Ferry, John Robson, M.D., to Janet, daughter of William Reid, Esq.

DEATHS.

GARRETT.—On the 9th inst., Mark B. Garrett, M.R.C.S.E., of Colet-place, Commercial-road East, aged 59.

M'COARD.—On the 8th inst., James M'Coard, M.D., of Belford, Northumberland.

M'MILLARD.—On the 7th inst., at Maxwelton-place, Paisley-road, Glasgow Isabella M'Farlane, the wife of Edward M'Millard, L.R.C.S.Ed.

REID.—On the 1st inst., at Melrose, Dr. Peter Reid, Surgeon R.N., aged 78.

SHEPHERD.—On the 7th inst., J. C. Shepherd, M.R.C.S.E., of Ambleside, Westmorland, aged 62.

TRUSTRAM.—On the 6th inst., at Tonbridge Wells (after a short illness), Harriett Julia, wife of Charles Trustram, M.R.C.S.

Medical Diary of the Week.

Monday, April 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ANTHROPOLOGICAL INSTITUTE.—8 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Bond, "On a Case of Lithotomy." Dr. Thorowgood: "Some Cases of Pleurisy with Effusion."—Mr. W. C. Lake, of Teignmouth, "On an Epidemic of Fever at Shaldon, Devon."

Tuesday, April 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. W. Pengelly, "On the Geology of Devonshire, especially of the New Red Sandstone."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following amongst other Specimens will be exhibited:—Dr. Murchison: Gall-stones followed by Pyæmia and Atrophy of the Liver. Drs. Murchison and Cayley: Post-mortem appearances in a Case of Paralysis Agitans. Dr. Dickinson: On the Nature of the Renal Calculi in the Museums of London. Mr. H. Arnott: Soft Cancer of the Breast. Dr. Crisp: Aneurism of the Coronary Artery. Mr. Thomas Smith: Calcareous Degeneration of a Scirrhous Cancer of the Breast. Mr. Lawson: A Hand Skinned by an Accident with Machinery.

Wednesday, April 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
HUNTERIAN SOCIETY.—7½ P.M. Meeting of Council.—8 P.M. Open Meeting.

Thursday, April 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Expected Operations, 3 P.M. By Mr. Teevan: Amputation of Forearm; Ligature of Nævi.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Sound."
HARVEIAN SOCIETY OF LONDON.—8 P.M. Mr. Fairlie Clarke, "On the Arrest of Hæmorrhage, Primary and Secondary."

Friday, April 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—9 P.M. Prof. Blackie, "On the Pre-Socratic Philosophy."

Saturday, April 22.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Lockyer, "On Astronomy."

Notes, Short Comments, and Answers to Correspondents.

BRITON MEDICAL AND GENERAL LIFE ASSOCIATION.

THE seventeenth annual meeting of this Association was held on the 23rd ult., and the result of the proceedings was to show that the condition of the Office both at head-quarters and at the branches was most satisfactory. The transactions of the past year were rather below those of the previous period, the panic which had prevailed throughout the insurance world having naturally affected the Briton in common with all other Offices; but as a proof of the stability and increasing prosperity of the Office, it was stated that the income from investments had increased between £3000 and £4000 during the year. A dividend at the rate of 8 per cent. per annum was declared on the capital of the Company as increased by bonus. Mr. Arthur Scratchley, the well-known eminent actuary, testified to the fact that the Briton "had achieved a position amongst Insurance Offices which was almost unexampled"; and the remarks offered by Mr. Messent, the indefatigable actuary and secretary, in acknowledgment of the cordial vote of thanks for his services, may be taken as an indication that the interests alike of the shareholders and policyholders of the Association are in the safest possible keeping. The Britannia Fire Association, in connexion with the Briton, is, we are glad to observe, progressing favourably.

ERROR OF DIAGNOSIS: ACTION AT LAW.

A PATIENT labouring under sore-throat was considered by his doctor to have small-pox, and sent to a Small-pox Hospital. At the hospital it was found that he had not small-pox, and the patient was sent back. He sued his doctor to recover damages "for creating false alarm, and putting him to expense." The learned judge decided that, though it was a painful case, the plaintiff had no legal remedy. And we think the learned judge gave a sound judgment. The medical man erred. It is a mistake to diagnose disease prematurely, and a still greater one to act upon the diagnosis so seriously as to send the patient to a small-pox hospital. No medical man ought to commit himself to such a diagnosis till the eruption appears. But an error of diagnosis, unless very unreasonable, is not a thing to be punished in a County Court. A medical man is liable, like other men, to err, and is sufficiently punished for an error by the corresponding loss of his patient's good opinion. Probably in this case the preliminary symptoms were like those of small-pox.

Medicus.—1. The M.D. of St. Andrews granted in the year of grace is perfectly good as a legal medical qualification.—2. The year of grace was 1862.—3. The year of grace meant a rather gracious use, in a given year, of the power of granting degrees before the abolition of this peculiar power then about to terminate.—4. The abolition was determined by an Act of Parliament, which was designed to elevate medical and other education.

A Canadian.—Thanks. We are well "posted" in all the doings of the individual.

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—At this time, when the Admiralty is desirous of obtaining a number of properly qualified young medical men to fill up the numerous vacancies in their list of assistant-surgeons—vacancies caused entirely by their lordships' constant breach of faith with the medical officers who have been unfortunate enough to believe their promises,—I would call the attention of those who intend joining to one or two of the many subjects of complaint, which I would have them duly consider before they finally make up their minds to add to the number of victims.

How would a young medical man, with the double qualification, eager in the pursuit of professional knowledge, and ambitious of making for himself a name in that branch of the public service in which he has embarked, like to find himself in the position of the junior assistant-surgeon in the flagship on a distant foreign station at this time, who, although a gentleman of high professional attainments, is not allowed by the authorities on board the ship to be competent to take medical charge of the ship at any time, either the staff surgeon or senior assistant-surgeon being compelled to be always on board—in fact, totally ignoring the existence of the junior medical officer, and reducing him to a position but little superior to that of a sick-berth steward? It is the constant recurrence of such insulting orders as that which does away with all zeal among this class of officers, however much they may have possessed when they first entered the service.

Again, it is an act of great injustice to call on a staff surgeon of twenty-five years' active service in all parts of the world to take alternate days of duty with an assistant-surgeon—in fact, to compel him to do the same duty he did when he first joined the navy, instead of attending to the duties of his position, which, I take it, would be to tender his professional advice to the commander-in-chief of the station relative to the hygienic condition of the ships on the station, the health or otherwise of the various ports visited, and the medical administrative duty of his own ship, as well as being the means of communication between the medical officers of the various ships and the commander-in-chief on professional matters.

Again, I would call the attention of aspirants to the breach of faith recently displayed by my Lords Commissioners relative to the cabin accommodation on board ship. According to article 340, paragraph 3, in the Addenda to the Queen's Regulations and Admiralty Instructions, and which dates from 1868, when a ship is commissioned the cabins are to be appropriated consecutively to the officers according to their seniority, irrespective of executive rank. Now, however, by a new circular, dated Oct. 21st, 1870, chaplains are in future to have the first choice of cabins, after the senior officer, after the captain, and the senior navigating officer have been provided for; which is to say that a staff surgeon of from twenty to twenty-five years' active service is to give place to a young chaplain, who possibly has just joined the service, and may not have been born at the time the staff surgeon commenced to serve his country abroad.

Once more might I call their attention to the recent regulations promulgated with regard to the retirement of naval officers of the civil branches of the service, and dated March 2nd, 1870, where we find that paymasters and secretaries can retire on £450 per annum; whereas the professional men, chaplains and staff surgeons, can only reach a maximum of £400, and then must have reached the (in the navy) venerable age of fifty-five.

Age, not active service, appears to be the *sine qua non* with the Admiralty now, and I should strongly recommend young medical men not to join the navy until they have carefully considered these points.

Yours obediently,
April, 1871. X. Y. Z.

"DEGREES IN ABSENTIA."

Dr. Sturman, of 145, Packington-street, who gives official instruction and advice to gentlemen who wish to procure degrees "*in absentiâ*," is very much dissatisfied with our notice of his advertisements. We see nothing to retract in what we said in THE LANCET of March 25th. We repeat that there can be no obligation on the part of the public to recognise degrees obtained in such a way.

Mr. P. P. Nind, (Torquay.)—The paper has not been received.

A CORRESPONDENT inquires when Prof. Harley will publish a more detailed account of his very interesting case of "Auto-Clinical Remarks on Injury to the Retina from Overwork with the Microscope."

Mr. Young, (Warrington.)—Yes.

Victoria Institute.—We are sorry that we cannot find room for the report of the meeting kindly furnished us by the Honorary Secretary.

SCHOOLS AND BATHING.

MR. C. P. MELLY, one of the members of the Water and Baths Committee of Liverpool, has requested the Liverpool School Board to furnish him with the number of children attending the schools in the town. Mr. Melly is anxious to make arrangements for the children to bathe once a week in the Corporation baths. The proposal is an excellent one. At nearly all the public baths there are certain hours of the day when they are very little used, and when they could scarcely be put to better use than in promoting habits of personal cleanliness amongst the children of dirty parents. This branch of education has been much neglected, and yet it is probable that personal uncleanliness is quite as great an obstacle to success in life as ignorance. Indeed the School Boards will only do half their duty if they confine their efforts to the cultivation of the mind, and leave the body to grow up in debility and dirt. Besides, in a nation whose home is the sea, it is most important that all should learn to swim. We hope, therefore, that this proposal will not be allowed to drop through, and that the London School Board will not think it unworthy of their notice.

THE communication of *M. A. B.* shall have our attention.

OUT-PATIENT HOSPITAL REFORM.

To the Editor of THE LANCET.

SIR,—I hope and trust the general practitioners of Great Britain will, without further delay, send to Dr. Meadows the sum needed to defray the expenses connected with the work of the Committee engaged in examining evidence, &c. &c., concerning the outrageous impositions relative to the out-patient hospital department. It is full time that impoverishing a noble profession should be checked, and not allowed to be carried on without making a quiet remonstrance. Within the last twenty years "evil days" have fallen on the working general practitioners of this country, greatly by reason of indiscriminate medical relief, without instituting any enquiry as to the position and means of persons applying for aid. Persons of large fixed incomes, as well as those with large earnings, have not scrupled to apply to hospitals where formerly such was not the practice, as free hospitals &c. did not exist. I ask, what is it that has assisted to lower the moral tone of the British artisans lately but the lavish distribution of charitable relief? What is it that has nearly doubled the cost of out-door relief but indiscriminate charity? Now, however, that various restrictions and discomforts are placed in the way of the idle and dissolute to gain a free support without labour, the general expenditure has been vastly reduced. Within the last twenty years, I say, the general practitioner has been gradually going to the wall as to independence and position. Many of our medical periodicals uphold medical reform in respect to a higher and more perfect education, but fail to aid in securing a moderate means of subsistence for its members. Conflicts between professional brethren are of frequent occurrence in consequence of the narrow limit of paying patients requiring professional services in the immediate district of the practitioner. The different grades of the profession are ever trying to outstrip each other by higher and higher qualifications. Many of our journals (yours excepted) are under the control of a few hospital physicians and surgeons—although they are principally supported by general practitioners of the country,—whose papers and views are always before the public, and who do not wish to act but independently of their lower qualified brethren. Such a state of things cannot endure long; it is unjust and unfair to the public and the profession.

"Honesté vivere, alterum non ledere,
Suum cuique tribuere."

Your obedient servant,

Bemborough-gardens, April, 1871. J. C. ATKINSON, M.D.

An Old Subscriber.—The title of "physician" is one that has not been legally defined. But it is difficult to say why a licentiate of a College of Physicians should not call himself a "physician," since a licentiate of a College of Surgeons calls himself a "surgeon." The chief objection is a moral one. In popular language, the word "physician" means at present one specially skilled in medical cases, and this of course does not apply to mere licentiates.

C. A. D.—The bills are dated May, 1868. Perhaps the individual in question has seen the error of his ways, and retracted his bills? If not, we shall be glad to know.

A Traveller's letter shall appear next week.

THE TREATMENT OF THE VARIOLOUS PUSTULE.

To the Editor of THE LANCET.

SIR,—In the *Practitioner* for this month there is an account of the various methods adopted in the treatment of the variolous pustule. Dr. Maraghano recommends the use of glycerine, and, from his experience of it in 800 cases, he finds that it "relieves tension, aids the crusts in separating, and hence leads to less pitting."

The good effects that I have seen produced in various cases of cutaneous irritation by a mixture of equal parts of glycerine and sulphurous acid would lead me to suggest a trial of this mixture in the treatment of the variolous pustule. In addition to the soothing relief that might be expected from its application, there might be something to hope for in the way of diminution of the contagiousness of this disease in the use of so powerful a disinfectant as sulphurous acid has proved itself to be. Applied to the whole surface, it would destroy to a great extent the loathsome smell of small-pox. Its sedative power upon an irritated skin is very great; no smarting follows its use, but a sense of cooling is imparted, such as few other agents are capable of producing.

Dr. M. adds a few drops of laudanum to the glycerine when there is much irritation. There would be no harm in adding it to the mixture I propose; but I imagine that without the opium it would be sufficiently sedative in its nature. The solution of sulphurous acid in methylated spirits is the very best remedy to apply to bruises and sprains. I have used it for these as well as for chilblains for more than a year, and have had ample experience of its usefulness.

Yours faithfully,

Marlborough, April 6th, 1871. WALTER FERGUS, M.D.

OBSTETRIC CHEMISTS.

THE *Bayswater Chronicle* gives some particulars of the death of a poor woman in her confinement, and who was attended by Mr. John William Carrington, chemist. Mr. Carrington said he attended cases of emergency; he had assisted medical men for twenty years, and had attended 700 midwifery cases. Mr. Carrington seems to have seen the patient on Monday and Tuesday. He did not see her on the Wednesday. He was sent for again on the Thursday, to find the child dead, and the mother flooding. He gave her an acid and opium mixture, "usual in such cases"! and went home to his dinner. "She died in the evening," he said at the inquest, "from exhaustion through loss of blood." The post-mortem revealed a rupture of the uterus four inches long. If such a case, extending through four days, is a case of emergency in Mr. Carrington's opinion, he must have strange notions of emergency. Our Bayswater contemporary is naturally shocked at the idea of a poor woman attended for three mortal days in her labour by a chemist, and seems to think it the duty of the medical press to denounce such practice. We have long denounced it; but the law is too lax to prevent it. And for this state of the law the public and the lay press are more responsible than the medical press.

Mr. W. P. Hutchinson, (Minneapolis, Minn., U.S.)—We are not aware that the Royal College of Surgeons *ever* did anything of the kind attributed to them by our correspondent. The subject is not to be made a clean end of by any scientific exposure. Like other forms of false science, it has its deep foundation in the ignorance of human beings.

Amator.—We see no objection under the circumstances.

PROMOTION IN THE ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—Your correspondent, "M.D.," is evidently satisfied with the rate of promotion in the army medical department. Well, all I can say is that if he has served fifteen years as an assistant-surgeon, and is satisfied, he is worthy of a place in the British Museum, or at all events to be placed under a glass-shade. Your correspondent goes on to state that an assistant-surgeon after five years' service receives 12*s.* 6*d.* a day, or £227 a year; but he does not tell you that he is mulcted of about £31 a year for band and mess fees; that he pays £46 for dinners alone; £6 or £7 a year income-tax, together with first-class hotel prices for breakfast, lunch, wine, and every necessary of life; that he is obliged to pay and clothe a servant, furnish his room in barracks, contribute to guest nights, and, in a word, maintain the appearance and position of a gentleman all on the magnificent sum of £227 a year. I consider that £120 a year in civil life would be equivalent to £227 in the military service. Your correspondent then goes on to state that a surgeon with £365 per annum is in a "grand position." The fact is, that a surgeon with £365 a year is obliged to pay over £50 for band and mess fees alone. According to the Queen's regulations, he should not pay so much; but these regulations are, as a rule, disregarded. The surgeon is subjected to the same expenses as the assistant-surgeon above mentioned, only in a greater degree. If the surgeon be married, he is almost always obliged to take a furnished house or lodgings, which generally cost from £80 to £130 a year, barrack accommodation being wholly unsuited for a married man. A surgeon is allowed two rooms; an assistant-surgeon one room, which must be his bed-room, sitting-room, and everything else. These are the magnificent allowances which the State gives to medical officers. I consider the pay of a surgeon (£365 a year) not more than equivalent to £200 a year in civil life; and if any man considers that a "grand position" after fifteen years' service, I wish him every luck of it. At the Committee which sat in 1866, to take into consideration the necessity of increasing the pay of army medical officers, it was stated by Dr. George Johnston that he considered a man should be in receipt of £500 a year when he had been ten years in practice. An assistant-surgeon of ten years' service is just entering on £272 per annum, minus many contributions! I do not think I can conclude better than by quoting a sentence which lately appeared in a leading article of THE LANCET, and with which I cordially agree—viz.: "The position of an assistant-surgeon after fourteen or fifteen years' service is unworthy of a man with an ounce of ambition."

Yours respectfully,

March 27th, 1871. AN ASSISTANT-SURGEON.

Vaccinator.—Persons are occasionally attacked with small-pox for the second time, although the rule undoubtedly is that one attack protects the individual from another. There is no reason, however, why a person should not outlive the immunity conferred upon him by a previous attack or by vaccination.

"JUST OUT."

Dr. Garrett, of Hastings, writes us the particulars of his somewhat hard case. He saw a book advertised in our columns and in others as follows:

"Just out, fourth edition, 2*s.* 6*d.*, by post 2*s.* 8*d.*, Diabetes and other Urinary Affections. By Abbotts Smith, M.D. 'A very useful and highly instructive manual.'—*Quar. Jour. of Med. Science.* London: H. Renshaw, 356, Strand, W.C."

He ordered the book through Churchill and Sons; and finding the matter of it rather old, he looked to see if he had got the right edition, and found it was the fourth. But the publisher's name was pasted over, and so was the date of the edition, which was 1867. At the foot of the preface the new residence of the author was pasted over the old one. In regard to any subject, a statement of it four years old is apt to be out of date. In regard to diabetes, the procedure of calling that "just out" which has been out for four years, and misleading the public by a coarse use of paste and paper, is a deception which we shall not further characterise. The pathology of diabetes has received most important additions since 1867. The most charitable conclusion is that Dr. Abbotts Smith has been no party to this proceeding; but he owes it to himself to demonstrate his innocence of it.

Dr. Wade, (Birmingham.)—We will endeavour to insert the lecture as soon as possible after its receipt.

"MEDICAL DIPLOMA WANTED."

THE following advertisement is from the advertising pages of a daily contemporary, somewhat famous for the high sounding ethics of its editorials. It is a pity that the same mind cannot extend its care to the advertising columns:—

"MEDICAL DIPLOMA WANTED.—Foreign would suit.—Send particulars and price, which must be moderate, to Medicus, 52 A, Barnard-street, Tavistock-square, W.C."

It is a very shocking fact that there should be some individual living at 52 A, Barnard-street, Tavistock-square, who wishes to buy a diploma for a very moderate figure; but it is far more shocking that he should be able to advertise his wishes in a London daily of high pretensions and great circulation. We leave the fact to be explained, and, failing this, to be exposed. The lesson taught to the profession by this strange phenomenon is severity and ignoring towards all diplomas and degrees that do not bear the strong light of day. What with getting diplomas by advertising in newspapers, and "degrees in absentiâ," coupled with the complete inactivity of the Medical Council, we shall have the profession flooded with false members and false titles.

SURGEONS OF FRIENDLY SOCIETIES.

AT Llanfair Caereinion an application was made lately to the magistrates by Christopher Gittins, tailor, against Dr. W. W. Thomas, surgeon to the Sons of Gomer Friendly Society, for having refused to grant a certificate of his son's eligibility to be entered a member of the Society. The rules required such a certificate before the Society could either receive or reject a member. As the surgeon declined giving it, and the rules required it, there was an end of the matter, and the magistrates declined to interfere. Of course it is not to be doubted that the surgeon had good reasons for refusing to grant a certificate.

Nemo.—Not worth notice.

Mr. Frederick Pratt.—The officiousness complained of is annoying; but clergymen get wiser, and begin to know the difference between their sphere and the medical man's. Our correspondent's suggestion would unduly magnify the grievance. Magnanimity is the proper treatment.

Dr. Pollock.—Thanks.

COW-POX.

To the Editor of THE LANCET.

SIR,—I possess an old copy of "Instructions for Vaccine Inoculation," signed "Edward Jenner." It contains a description of the course of the true vaccine vesicle as observed by him; and in comparing this description with the course of the vesicle produced by lymph that has been a long time in use, several marked differences are noticed, which have been already adverted to in your pages.

During the last two years I have vaccinated entirely with recent lymph from the heifer, or with matter of the first or second generation. The course of the vesicle in these cases is identical with that of Jenner, and free from those modifications which attend the use of old lymph. The inference to draw from this is, that the affection produced by weak lymph is a *vaccinoid* disease, bearing the same relation to perfect vaccinia as varicloid does to variola; and we have Jenner's authority and experience to inform us that the former will not safely protect against small-pox. A further inference is, that there is weak lymph and there is active lymph. Once acknowledge the existence of variety, and the necessity of going oftener to the fountain-head becomes at least more apparent; not, indeed, that all stocks of matter are uniform even at their origin. These differences are affected only in degree by careful government cultivation; nor is it possible over the length and breadth of the land by any human arrangements to insure that accuracy of detail which would obviate the necessity of an occasional resort to the cow. Hence the position that vaccine virus never undergoes degeneration is only a theory. What is wanted is a government organisation for discovering cases of spontaneous cow-pox, collecting the virus, and multiplying it upon the bodies of young heifers for transmission as occasion requires to their vaccination stations, and for the supply of all medical men who demand it. In the absence of spontaneous cases, artificially excited cow-pox after Mr. Cooly's method should be substituted, and its too great activity modified in like manner by transmission to the heifer.

If it were deemed advisable not to disturb the unity of our vaccination arrangements by (even partially) introducing the Belgian system, the locality of this establishment might be placed at a distance from the great centres of population, and so managed as to become recognised as an addition to, not a revolution in, our present system.

I am, Sir, yours, &c.,
JOHN GREENE, L.R.C.P., &c.

Friday Bridge, Birmingham, March 20th, 1871.

ACCOUCHEURS' FEES.

AN attempt to evade the payment of an obstetric fee, on the ground of the non-arrival of the accoucheur until after the birth of the child, notwithstanding repeated messages, failed a few days ago in the Liverpool County Court. The plaintiffs were Messrs. Reid and Sprakeling, who had been engaged to attend Mrs. Stonell, the wife of the defendant. Mr. Sprakeling said that he only received one message, and went with reasonable haste. The nurse said that on the morning of the confinement she sent for Mr. Sprakeling five times; she sent first about seven o'clock, and he came about ten. Mrs. Stonell had previously fixed a quarter-past eight as the time of the first message. The deputy judge considered that the defendant made no answer to the plaintiffs' case, and gave a verdict for the amount claimed—two guineas, with costs.

Mr. A. Husband.—Probably next week.

A Subscriber of Twenty-nine Years' Standing.—Our correspondent will oblige by stating a little more clearly the exact question which he wishes to have answered. Does he propose to take charge of the patient merely as an epileptic or as a lunatic?

R. W. B.—We believe that he cannot.

ANIMAL VACCINATION IN NEW ZEALAND.

WE gather from papers received that an enthusiastic believer in the superiority of animal over human lymph has received a stock of the former from Brussels, and handed it over to the public authorities. He wishes above all things that parents should be able to choose which they will have used in the vaccination of their children. We do not share this gentleman's belief either in the superiority of animal lymph or in the value of the judgment of parents in this matter.

H. S. G.—It is aquæ, and not aquam, because the sense of the prescription is as follows: R Sex uncias *aquæ*—i. e., take, not water, but six ounces *of* water.

EPSOM COLLEGE.

To the Editor of THE LANCET.

SIR,—Having troubled you some two years ago somewhat lengthily (*vide* THE LANCET, July 3rd, 1869), I will endeavour not to encroach too much upon your valuable space while I endorse every word of a letter from your correspondent, Mr. Little (my coadjutor as Hon. Sec.) on Saturday last on the subject of elections at Epsom College, bearing so much as it does upon the subject of my letter of the date referred to above. I will be content to refer him and any or all others who may feel the least interested on the subject to it. There will also be seen immediately below it one from Mr. O. Foster (also an Hon. Sec.); so that now I hope many of our fraternity will be moved to follow the matter up, and urge upon the Council the absolute necessity for doing something to lessen the great difficulty and expenses incurred by candidates for election. As then, it still appears to me so perfectly practicable, that for myself I do most earnestly hope it will be recognised and gone into by the Council before the election of 1872 at least.

I am, Sir, your obedient servant,
East Rudham, April 4th, 1871. FRED. MANBY, Hon. Sec.

FORM OF ADVERTISEMENT.

"Dr. Freeman, Physician and Surgeon, late Surg. Superint. Ship *Scoresby* to N. Zealand and H.M.S. *King Arthur*, with Insane Patients from Calcutta, 31, James-square, Wolverhampton." Hereafter follow in the circulars various testimonials from Mr. Cock, Mr. Poland, Mr. Odling, and Dr. Oldham, which "Dr." Freeman has been "over-persuaded by his patients to have put into print and circulation." Appended to the name of each of the testimonialists is a full description of his professional titles, &c. There are many arguments against the practice of giving testimonials, but this strange use of them is a potent one. If "Dr." Freeman has no more respect for himself than to issue circulars, he should at least have been restrained by consideration of the gentlemen whose kindness he thus abuses.

GRADUATED CHLOROFORM BOTTLE.

To the Editor of THE LANCET.

SIR,—Will you allow me to correct an erroneous impression under which Mr. J. Astley Bloxam labours with regard to the graduated chloroform bottle. I fully believe that the idea was original with Mr. Bloxam, inasmuch that he was not aware that such a thing had been in existence previously. But it is due to Messrs. MAW, SON, and THOMPSON, of Aldersgate-street, to say that twelve months ago they made a graduated guttatim chloroform bottle for me, which I have had in use ever since. Nor was the idea original even then; for about three years before that I saw with Mr. W. STOKES, of Dublin, a similar bottle, enclosed with an inhaler in a neat case, the bottle being flat.

Yours obediently,
Hartshill, Stoke-upon-Trent, April 3rd, 1871. J. A. ROSS, M.D.

NITROUS OXIDE GAS.

Dr. Maurice G. Evans wishes us to state that "R. S. P. P." can obtain the apparatus he requires at Coxeter's, Grafton-street, London.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson; Prof. Parkes, Netley; Prof. Struthers; Mr. Poland; Mr. E. Simmonds, Lincoln; Mr. Griffiths, Newport; Mr. Hand, Marlborough; Mr. T. Jones; Mr. Grant, Mitcham; Mr. Crossley, Southend; Mr. Young, Warrington; Mr. Noble; Mr. Domoitte, Exeter; Mr. Hunt; Mr. Roberts; Mr. Hale, Staveley; Mr. Beardsley, Grange; Mr. Johnston; Mr. Plum, Worcester; Mr. Black, Ware; Mr. Dunkley, Chesterfield; Dr. Gayton; Mr. Bennett, Canterbury; Mr. Cooke, Walsall; Mr. G. Brown, Reigate; Mr. J. Adams; Mr. J. Cleft, Lichfield; Dr. Black, Glasgow; Mr. Taylor, Rotherham; Dr. Pollock; Dr. Hood; Mr. Prowse; Mr. Whalley; Mr. Barron, Walsingham; Mr. Thompson, Uxbridge; Dr. Phillips; Mr. Thomas, Worthing; Mr. Moore, Cardiff; Mr. Holding, Kettering; Mr. Beckett; Mr. R. Davis; Dr. Denton; Mr. Pern, Botley; Mr. Lee; Mr. R. Leech; Dr. Chapman, Folkestone; Dr. Rhodes, Great Horton; Mr. Shedden; Dr. James, Cum-Avon; Mr. Gordon; Mr. Grant; Dr. Aldis; Dr. Skene, Castle Douglas; Dr. Curran, Dublin; Dr. Wise, Plumstead; Dr. de la Motte; Mr. Dearden, Preston; Mr. Gamgee, Birmingham; Mr. R. Hill; Dr. Mackeson, Buxton; Dr. Godfrey; Dr. Iliff; Mr. Malvany, Haslar; Mr. R. Adams, Caterham; Mr. Thwaites, Dublin; Dr. Harland; Mr. Husband; Dr. Garrett, Hastings; Mr. Bellamy; Mr. Savage, Birmingham; Dr. Dyke, Plymouth; Dr. Hime; Dr. Fergus, Marlborough Dr. G. Johnson; Mr. J. Glanville, Trinidad; Mr. Millard, Glasgow; Dr. Atkins; Dr. Smith, Seaforth; Mr. Lawrence; Dr. Evans, Narberth; Dr. Reed; Mr. Treves, Margate; Dr. Harris, Godstone; Mr. Mahon, Swindon; Mr. Ede, Charleston; Mr. Hopgood, Sunderland; Mr. Davies; Dr. Gillard, Hovingham; Mr. Walker, Handley; Mr. Grigg; Mr. Prall, West Malling; Mr. Hodson; Dr. Worde, Wakefield; Dr. Clarke, Liverpool; Mr. Etty; Mr. Nind, Torquay; Mr. Kelly, Dublin; Mr. Fenn; Dr. Hollard; Dr. Mitchell; Mr. Lake, North Walsham; Mr. Moore; J. F.; Medicus; Inquirer; R. W. B.; W. F. R.; A Canadian; A Wanderer; M.B.; A Consulting Physician; M.R.C.S.; X. Y. Z.; &c. &c.

Alloa Journal, Burnley Gazette, Brighton Guardian, Scotsman, Bradford Telegraph, Middlesborough Gazette, Fife Herald, Port of Spain Gazette, School Board Chronicle, and *Newcastle Daily Journal* have been received.